

Table S1: Ethnobotanical information on medicinal plants against infective diseases of respiratory tract in Tanzania

Table S2: Anti-microbial activity of plants traditionally used against infective diseases of respiratory tract in Tanzania

Table S3: Natural products with antimicrobial activity from selected plants traditionally used against infective diseases of respiratory tract in Tanzania

Table S1: Ethnobotanical information on medicinal plants against infective diseases of respiratory tract in Tanzania (Keywords for searching: tuberculosis, TB, pneumonia, cough)

S. NO.	FAMILY	PLANT NAME	VOUCHER SPECIMEN	HABIT	PART USED	CLAIM FOR RESPIRATORY DISEASE RELATED CONDITION	OTHER CLAIMS FOR DISEASE TREATMENT IN CONDITION	PREPARATION	BOOK OR JOURNAL REFERENCE
1	Acanthaceae	<i>Acanthus pubescens</i> (Oliv.) Engl.	MJM 3028	shrub	leaves, root	coughs, pneumonia	treatment of warts, syphilis and gonorrhoea	the leaves are put on fire to allow partial burning and then squeezed and one tablespoon full of the liquid is given to children to treat coughs	[63, 64]
2		<i>Adhatoda engleriana</i> (Lindau) C.B. Clarke	n.d. TMP: 185, 284	n.d. herb	root	TB	laxative, epilepsy		[65] [66]
3	Achariaceae	<i>Caloncoba welwitschii</i> (Oliv.) Gilg	n.d.	tree	bark	pneumonia			[67]
4	Amaranthaceae	<i>Achyranthes aspera</i> L.	TMP: 103	herb	root	pneumonia		applied externally	[66, 67]
5		<i>Chenopodium ambrosioides</i> L. (syn. <i>Dysphania ambrosioides</i> (L.) Mosyakin & Clemants)	TMRU: 2972	herb	leaves	cough			[68, 69]
6	Anacardiaceae	<i>Lannea schimperii</i> (Hoechst. Ex A. Rich) Engl.	DK 047/06	tree or shrub	bark	TB	skin rashes, herpes zoster, herpes simplex, chronic diarrhea		[70]
7		<i>Lannea stuhlmannii</i> Engl. (syn. <i>Lannea schweinfurthii</i> var. <i>stuhlmannii</i> (Engl.) Kokwaro)	TMRU: 1822, 2448, 2992	tree	root	TB	stomachache, fever, asthma, dysentery	powdered root hairs taken with water against TB	[71]
8		<i>Mangifera indica</i> L.	DK 037/06	tree	leaves	TB			[70]

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			TMRU: 963	n.d.	leaves	cough	skin diseases, dysentery, asthma		[68, 71]
			n.d.	n.d.	bark	TB	waist pains, infertility, dysentery		[67]
9		<i>Ozoroa insignis</i> Delile	n.d. DK 023/06	n.d. tree	stem bark root	TB TB	skin rashes, herpes simplex, herpes zoster, cryptococcal meningitis, oral candidiasis		[65] [70]
10		<i>Ozoroa mucronata</i> (Bernh.) R. Fern & A. Fern.	TMRU: 580, 1966, 2389 TMRU: 580, 1966, 2389	tree	root, leaves	cough	fever, gonorrhoea, bilharzia, imotency	decoction of roots and leaves	[71]
11		<i>Pseudospondias microcarpa</i> (A. Rich.) Engl.	DK 005/06	shrub or tree	leaves, bark	TB	oral candidiasis		[70]
12		<i>Rhus natalensis</i> Bernh. Ex C. Krauss. (syn. <i>Searsia natalensis</i> (Bernh. Ex C.Krauss) F.A.Barkley)	TMP: 28	shrub	leaves	cough	colds, stomach pains		[66, 72]
13	Annonaceae	<i>Annona senegalensis</i> Pers.	TMRU: 1670, 2321, 2804	tree	root	pneumonia	cold, fever, chest pain, abdominal pain, vaginal prolapse, venral sores, menorrhagia	decoction of roots	[71]
14		<i>Polyalthia stuhlmannii</i> (Engl.) Verdc.	TMRU: 308	shrub	root	cough	meningitis, rheumatic pain	decoction of roots	[71]
15		<i>Uvaria acuminata</i> Oliv.	TMRU: 1550, 1609, 1697	shrub	root	cough	abdominal pain, dysentery,	decoction of roots	[71]

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16	Apocynaceae	<i>Diplorhynchus condylocarpon</i> (Müll. Arg.) Pichon.	TMRU: 70, 3048	tree	root	pneumonia	menorrhagia, snake bite, pectoral diseases	decoction of roots	[71]
			n.d.	n.d.	root	cough	fever, hernia, frequent abortion and sterility in females, leprosy, gonorrhoea	roots cooked with meat and the soup drunk	[73]
17		<i>Rauwolfia caffra</i> Sond.	n.d.	tree	root and stem barks	TB	antioxidant, antimicrobial	grind the stem barks and smell for headache. Root used for treatment of TB	[73]
			TMRU: 2980	tree	root	pneumonia	general body swellings, rheumatisms		[71, 72]
18	Araliaceae	<i>Stylochiton hennigii</i> Engl.	TMRU: 208	herb	root	bloody cough	constipation, hernia	decoction of roots given to children	[71]
19	Asparagaceae	<i>Asparagus africanus</i> Lam.	TMRU: 2323, 2340	herb	root	cough	sore throat		[72, 74]
20		<i>Asparagus setaceus</i> (Kunth) Jessop	TMRU: 1166	herb	fruits and leaves	pneumonia, cough			[71, 72]
21		<i>Dracaena steudneri</i> Engl.	DK 014/06	shrub or tree	bark	TB	cryptococcal meningitis, oral candidiasis		[70]
22	Bignoniaceae	<i>Kigelia africana</i> (Lam.) Benth.	SMM-BD03	tree	stem bark	pneumonia	bilharzia, coughing, and female gynaecological problems, gonorrhoea, dysentery	stem bark is boiled in water and drunk	[65] [75]
			TMP: 52, (134), (136), 141	tree	stem bark	cough	expectorans		[66, 76]

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23		<i>Markhamia obtusifolia</i> (Baker) Sprague	TMP: 159, 164A	shrub	root	cough	scrofula, hookworm, snake bites	decoction of roots	[66, 77]
24		<i>Markhamia zanzibarica</i> (Bojer ex DC.) K. Schum.	TMRU: 382	tree	root	pneumonia	abdominal paint, psychiatric problems	decoction of roots	[71]
25		<i>Stereospermum kunthianum</i> Cham.	TMRU: 115	tree	root	cough	leprosy		[71, 77]
26	Boraginaceae	<i>Cordia 5ysmenor</i> Lam.	n.d.	tree	root	TB	cough, asthma		[78]
			n.d.	n.d.	root	TB			[65]
27		<i>Ehretia amoena</i> Klotzsch	TMRU: 1767	tree	root	TB, pneumonia	epilepsy, convulsions with fever, hookworm	decoction of roots	[71]
28		<i>Tecomaria capensis</i> (Thunb.) Spach.	n.d.	n.d.	leaves	pneumonia	bleeding gums, diarrhea, enteritis		[79]
29		<i>Trichodesma zeylanicum</i> (Burm.f.) R.Br.	TMP: 150	herb	root	TB	diuretic and against rheumatoid arthritis	decoction of roots	[66]
			n.d.	herb or shrub	stem bark	TB		powder in boiled water, oral; doze: 125 mL x 3 till cure	[78]
30	Canellaceae	<i>Warburgia salutaris</i> (Bertol.f.) Chiov.	n.d.	tree	bark	pneumonia	cough, haenia, typhoid fever, stomach ache		[67]
31		<i>Warburgia ugandensis</i> Sprague	n.d.	tree	n.d.	TB			[80]
			TMRU: 214	tree	leaves	TB	antidote in poisoning		[71]
			n.d.	tree	stem bark or root	TB, cough	asthma	stem bark boiled in water; one cup three times a day for TB and asthma; or soak powdered root in cold water, one table spoon three times a day till cure for cough	[78]

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32	Cannabaceae	<i>Trema orientalis</i> (L.) Blume	n.d. TMRU: 1552	n.d. shrub	stem bark leaves	TB pneumonia, cough	bornichtis, antidote to general poisoning		[65] [72, 81]
33	Capparaceae	<i>Boscia angustifolia</i> A. Rich	n.d.	shrub or tree	bark	cough		stem bark boiled in water; 1 teaspoon three times a day	[78]
34		<i>Cadaba farinosa</i> Forssk.	n.d.	tree	leaves	TB	ulcers, dysentery		[67]
35		<i>Capparis erythrocarpos</i> Isert	DK 028/06	shrub	root	TB	skin rashes, cryptococcal meningitis, oral candidiasis, herpes zoster, herpes simplex, chronic diarrhea		[70]
36		<i>Capparis tomentosa</i> Lam.	DK 020/06	shrub	root	TB	oral candidiasis, herpes zoster, herpes simplex		[70]
			TMRU: 2780	tree or shrub	root	pneumonia, cough	impotency, barrenness, wounds, ophthalmic problems, leprosy		[68, 69]
37	Celastraceae	<i>Elaeodendron buchananii</i> (Loes.) Loes. (syn. <i>Cassine buchananii</i> Loes.)	TMRU: 187	tree or shrub	root	coughing blood	wounds, syphilis		[69, 72]
38		<i>Maytenus senegalensis</i> (Lam.) Exell. (syn. <i>Gymnosporia senegalensis</i> (Lam.) Loes.)	DK 018/06	shrub or tree	bark/root	TB	herpes simplex, herpes zoster, oral candidiasis, skin rashes		[70]
			TMRU: 11	shrub or tree	root	pneumonia		root decoction	[69]
39	Chrysobalanaceae	<i>Parinari curatellifolia</i> Planch. Ex Benth.	DK 039/06	tree	bark/root	TB	skin rashes, chronic diarrhea, herpes zoster, herpes simplex		[70]

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40	Clusiaceae	<i>Garcinia buchananii</i> Baker	DK 063/06	tree	bark/root	TB	chronic diarrhoea, cryptococcal meningitis, herpes zoster, herpes simplex, skin rashes		[70]
41	Combretaceae	<i>Combretum collinum</i> Fresen.	n.d. DK 041/06	n.d. tree	root bark leaves/bark/ root	TB TB	chronic diarrhea		[65] [70]
42		<i>Combretum fragrans</i> F. Hoffm. (syn. <i>Combretum adenogonium</i> Steud. Ex A.Rich.)	TMRU: 2792	tree	root	cough	syphilis		[69, 72]
43		<i>Combretum zeyheri</i> Sond.	TMP: 210	tree	leaves	cough		dried leaves smoked	[66, 72]
44		<i>Terminalia kilimandscharica</i> Engl.	TMP: 151	tree	stem bark	cough	asthma, pains in back and loins	decoction of stem bark drunk	[66]
45	Compositae (Asteraceae)	<i>Ageratum conyzoides</i> (L.) L.	MJM 3023	herb	root, leaves	cough	constipation, peptic ulcers and fibroids, women with difficulties to conceive	roots are chewed fresh as an anti-acid and antiseptic; leaves are boiled and decoction taken as tea	[63]
46		<i>Crassocephalum mannii</i> (Hook.f.) Milne-Redh. (syn.: <i>Solanecio mannii</i> (Hook.f.) C. Jeffrey)	TMRU: 3182 n.d.	herb shrub or small tree	root root	cough TB	chest complaints asthma	boil roots with a soup of sheep; Used fresh, 1 cup x 3; very short shelf life of 3 days	[69, 72] [78]
47		<i>Microglossa pyrifolia</i> (Lam.) Kunze	MJM 3200	shrub	leaves	cough	cleansing airways, colds, flu	leaves are pounded and the sap squeezed into the nostrils	[63]

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			TMP: 275	trailing shrub	sub-entire plant	chronic cough with fever	stomach pains, headache, pain in chest and shoulders with chronic rhinitis, for heartburn, epilepsy, hookoworm, furunculosis, impotence cryptococcal meningitis		[66, 68]
48		<i>Senecio discifolius</i> Oliv. (syn. <i>Emilia discifolia</i> (Oliv.) C. Jeffrey)	DK 058/06	tree	bark	TB			[70]
49		<i>Senecio stuhlmannii</i> Klatt (syn. <i>Solanecio cydoniifolius</i> (O. Hoffm.) C. Jeffrey)	MJM 3043/3134	climbing herb	leaves	cough	wounds, swellings, stiff neck, poisoning	for coughs the leaves are baked with salt and chewed.	[63]
50		<i>Vernonia adoensis</i> Sch. Bip. Ex Walp (syn. <i>Baccharoides adoensis</i> (Sch. Bip. ex Walp.) H. Rob.)	DK 008/06 n.d.	herb	leaves root	TB TB	digestive/appetizer, stomach pain, blotches, gonorrhoea		[70] [82, 83]
51		<i>Vernonia sismenior</i> (L.) Less (syn. <i>Cyanthillium cinereum</i> (L.) H. Rob.)	n.d.	herb	root and leaves	TB	febrifuge, vermifuge, malaria, incontinence, pile, cough, pneumonia, asthma, bronchitis, snake-bite		[82, 83]
52		<i>Vernonia colorata</i> (Willd.) Drake (syn. <i>Gymnanthemum coloratum</i> (Willd.) H. Rob. & B. Kahn)	TMP: 95	shrub	root	cough	emetic, antifebrile		[66, 68]
53			TMP: 143	shrub	leaves	cough		infusion	[66, 72]

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		<i>Vernonia hildebrandtii</i> Vatke	n.d.	n.d.	leaves, stem	cough	strangulated hernia, stomach troubles		[79]
54		<i>Vernonia zanzibarensis</i> Less.	TMRU: 935	shrub	leaves	cough			[69, 72]
55	Convolvulaceae	<i>Ipomoea sinensis</i> (Desr.) Choisy (syn. <i>Ipomoea biflora</i> (L.) Pers.)	DK 055/06	herb	leaves	TB	oral candidiasis		[70]
56	Costaceae	<i>Costus afer</i> Ker Gawl.	TMRU: 1148	herb	leaves	whooping cough		the leaves are crushed, then cooked in sugar-cane juice and the liquid is drunk.	[81]
57	Crassulaceae	<i>Bryophyllum pinnatum</i> (Lam.) Oken	MJM 3107	herb	leaves	cough	cold/flu	the succulent leaves are wrapped in banana leaves and baked under fire; the baked leaves are then squeezed and the exuding juice administered to the patients orally	[63]
58	Dennstaedtiaceae	<i>Pteridium aquilinum</i> (L.) Kuhn	DK 029/06	fern	leaves	TB	oral candidiasis		[70]
59	Ebenaceae	<i>Diospyros fischeri</i> Gürke	n.d.	tree	leaves	cough	asthma	soak pound leaves in fresh cold water; one cup three times per day till cured	[78]
60		<i>Diospyros mespiliformis</i> Hochst. Ex DC.	n.d.	n.d.	leaves	cough	anthelmintic, and sores, dysentery	wounds, leprosy,	[79]

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61		<i>Euclea divinorum</i> Hiern	TMP: 229	shrub	root	pneumonia	chest pains, internal body swellings	a decoction of the roots mixed with roots of <i>Croton megalocarpus</i>	[84]
62	Euphorbiaceae	<i>Acalypha fruticosa</i> Forssk.	TMRU: 1201, 1835	shrub	root	cough	stomach problems		[72, 85]
			n.d.	n.d.	leaves	cough	chest pains, stomach aches, cholera		[68, 74]
			n.d.	n.d.	leaves	cough	cholera, stomach ache, chest pains		[79]
63		<i>Croton dichogamus</i> Pax	TMP: 294	shrub or tree	root	TB		powdered root in porridge or tea	[84]
			n.d.	n.d.	root	TB			[65]
64		<i>Euphorbia heterochroma</i> Pax	TMP: 242	tree	root and stems	TB, cough		a decoction of the fresh roots	[84]
65		<i>Euphorbia hirta</i> L.	n.d.	n.d.	plant	cough	gonorrhoea, dysentery, boils, ophthalmic, wounds		[79]
67		<i>Jatropha curcas</i> L.	TMRU: 2935	shrub or tree	root	pneumonia	abortivum, anthelmintic, laxative and syphilis	root decoction	[74, 86]
68		<i>Mallotus oppositifolius</i> (Geiseler) Müll. Arg.	TMRU: 1116	tree or shrub	leaves	pneumonia			[74, 77]
69		<i>Ricinus communis</i> L.	DK 048/06	herb	root	chronic cough			[70]
70		<i>Sapium ellipticum</i> (Hochst.) Pax (syn. <i>Shirakiopsis elliptica</i> (Hochst.) Esser)	DK 019/06	shrub or tree	bark	TB	herpes zoster, cryptococcal meningitis		[70]
71		<i>Spirostachys africana</i> Sond.	TMRU: 1495, 1630, 2379	tree or shrub	root bark	cough	diarrhea, bilharzia	rootbark decoction	[74]
72		<i>Suregada zanzibariensis</i> Baill.	TMRU: 2117, 2367	shrub	root	pneumonia	stomach aches, hernia, chest pains, malaria,	root decoction	[74]

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73		<i>Synadenium glaucescens</i> Pax. (syn. <i>Euphorbia neoglaucescens</i> Bruyns)	TMP: 194	shrub	root	TB, severe cough	schistosomiasis, chickenpox, gonorrhea	cold water extract of the debarked root with sugar after standing for 3 days	[84]
74	Lamiaceae (Labiatae)	<i>Coleus barbatus</i> (Andrews) Benth. Ex G. Don (syn. <i>Plectranthus barbatus</i> Andrews, syn. <i>Plectranthus comosus</i> Sims)	TMP: 164 (223) DK 071/06	shrub shrub	leaves leaves	cough TB	tonsillitis herpes zoster, herpes simplex, skin rashes, oral candidiasis	leaves are pounded and drunk with water	[84] [70]
75		<i>Hoslundia opposita</i> Vahl	TMRU: 109, 238, 285, 1013 TMP: 2, 7, 17, 24, 46, 51, 60, 63, 108, 128, 213 n.d.	shrub shrub n.d.	root root entire plant	cough cough cough	gonorrhoea, cystitis, blenorhoea, liver disease, pains in the chest, fever, hookworm, stomach disorders, wounds, mental disturbance	decoction of roots	[72, 74] [84] [68, 84]
			n.d.	shrub	root	cough	asthma	powdered roots boil in water; 1 teaspoon three times a day	[78]

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			n.d.	n.d.	plant	cough	gonorrhea, cystitis, wounds, liver disease, blenorrhoea, hookworms		[79]
76		<i>Hyptis pectinata</i> (L.) Poit.	TMRU: 2877	herb	leaves	cough	roundworm, fever		[68, 74]
77		<i>Ocimum suave</i> Willd. (syn: <i>Ocimum gratissimum</i> L.)	TMP: 77	shrub	leaves	cough	abdominal pains, sore eyes, ear troubles		[72, 84]
78		<i>Vitex fischeri</i> Gürke	DK 068/08	shrub	bark	TB	herpes zoster		[70]
79	Lauraceae	<i>Ocotea usambarensis</i> Engl.	n.d.	tree	bark	coughing	stomach gas, roundworms	infusion	[87]
80	Leguminosae (Fabaceae)	<i>Abrus precatorius</i> L.	TMRU: 2801, 2827	shrub, prostrate or climbing	leaves	cough	fever and dizziness	leaves are crushed and the juice drunk	[85]
			TMP: 49, 61	shrub, prostrate or climbing	leaves	cough	conjunctivitis, stomach troubles	decoction of the leaves	[88, 89]
81		<i>Acacia brevispica</i> Harms	n.d.	shrub	root bark	TB, cough		decoction of <i>A. brevispica</i> (root bark) + <i>W. ugadensis</i> (stem bark) + <i>C. febrifuga</i> (root bark) + Lusunga root in hot water. 1 spoon full + 3 daily till recovery	[78]
			TMRU: 28	tree or shrub	root	cough		the root decoction is drunk	[85]
82		<i>Acacia bussei</i> Sjostedt	TMP: 289	tree	bark	cough		a decoction of the bark is drunk	[72, 84]

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83		<i>Acacia mellifera</i> (M. Vahl) Benth.	TMP: 220	tree	bark	pneumonia	stomach trouble, sterility, syphilis	the bark is boiled in water and the liquid used as a remedy	[72, 84]
			n.d.	n.d.	bark	pneumonia	Syphilis, sterility, stomachache		[79]
84		<i>Acacia nilotica</i> (L.) Delile	TMRU: 2133, 2345	tree	root	TB			[68, 85]
			TMRU: 2133, 2345	tree	leaves	pneumonia			[72, 85]
			TMRU: 2133, 2345	tree	stem bark	cough	fever		[72, 85]
			n.d.	n.d.	plant	TB, pneumonia	gonorrhoea, diarrhoea, smallpox		[79]
85		<i>Acacia polyacantha</i> subsp. <i>Campylacantha</i> (A. Rich.) Brenan	TMP: 202	shrub	n.d.	pneumonia	throat troubles, leprosy, gonorrhoea		[68, 84]
			TMRU: 1428	tree	root	whooping cough		root infusion	[85]
86		<i>Afrormosia angolensis</i> (Baker) de Wild. (syn. <i>Pericopsis angolensis</i> (Baker) Meeuwen)	n.d.	tree	root bark	TB		powder in hot water, 1 tea spoon x 3	[78]
87		<i>Azelia quanzensis</i> Welw.	TMRU: 1256	tree	stem bark	pneumonia	antimalarial		[71, 77]
88		<i>Albizia anthelmintica</i> Brongn.	n.d.	shrub or tree	bark	cough	asthma	powdered bark boil in water; one cup four times a day	[78]

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89		<i>Albizia versicolor</i> Oliv.	TMRU: 3211	tree	stem bark	cough		powdered stembark is dried and sniffed to relieve cough	[85]
			TMP: 47	tree	stem bark	cough		the cold-water extract is beaten to produce foam and eaten	[77, 89]
			n.d.	tree	root	cough		grind and cook root with a lizard called <i>gemwambuli</i> , 1 teaspoon three times a day	[78]
			n.d.	n.d.	leaves	TB			[65]
90		<i>Bauhinia reticulata</i> DC.	n.d.	n.d.	plant	cough	dysentery, roundworms, malaria	leprosy, anthrax,	[79]
91		<i>Cajanus cajan</i> (L.) Millsp.	n.d.	herb	leaves	cough		dry leaves in hot water, one teaspoon three times a day	[78]
92		<i>Cassia abbreviata</i> subsp. <i>Beareana</i> (Holmes) Brenan	TMP: 163	tree	root	pneumonia	chest complaints, uterine troubles and fever of malaria, suspected syphilis, gonorrhoea	decoction of roots	[66, 72]
		<i>Cassia abbreviata</i> Oliv.	n.d.	n.d.	dry root	pneumonia	gonorrhoea, syphilis, diarrhoea, dysentery, malaria		[79]
93		<i>Cassia mimosoides</i> L. (syn. <i>Chamaecrista mimosoides</i> (L.) Greene)	DK 0024/06	herb	leaves/root	TB			[70]

S. NO.	FAMILY	PLANT NAME	VOUCHER SPECIMEN	HABIT	PART USED	CLAIM FOR RESPIRATORY DISEASE RELATED CONDITION	OTHER CLAIMS FOR DISEASE TREATMENT IN CONDITION	PREPARATION	BOOK OR JOURNAL REFERENCE
94		<i>Cassia singueana</i> Delile (syn. <i>Senna singueana</i> (Delile) Lock)	TMP: 53	shrub	leaves	pneumonia	bronchopneumonia	crushed leaves are drunk	[66]
95		<i>Dichrostachys 15ysmenor</i> (L.) Wight & Arn.	n.d.	tree	leaves, stem and root bark	TB	antidiarrheal, antioxidant, nephroprotective, immunostimulant, antibacterial	grind the leaves and dress the wounds. Roots decoction used for TB, infertility, veneral diseases, abdominal ulcers	[73]
			n.d.	tree	root	TB	chronic ailments, infertility, veneral diseases		[67]
			TMP: 25, 43, 92	tree	root	TB		the smoke of the root and/or leaf is inhaled to treat pulmonary TB	[68, 84]
		<i>Dichrostachys 15ysmenor</i> (L.) Wight et Arn. Subsp. <i>15ysmenor</i> Brenan & Brummitt	TMP: 25, 43, 92	tree or shrub	leaves	pneumonia		leaf juice is drunk	[77, 84]
			TMRU: 1680, 1953	tree or shrub	root	pneumonia, persistent cough	burning abdominal pains, bloody diarrhoea, threatened abortion	decoction	[85]
		<i>Dichrostachys cinerea</i> (L.) Wight & Arn. (syn. <i>Dichrostachys glomerata</i> (Forssk.) Chiov.)	n.d.	tree or shrub	root bark	TB	asthma	boil mixed root powder of <i>D. glomerata</i> and <i>Albizia versicolor</i> + cow liver	[78]
96		<i>Entada abyssinica</i> A. Rich.	TMRU: 3132	tree	root bark	TB, cough	catarrh and asthma	powder in boiled water, oral; 125 mL three times a day till cured	[77, 85]

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			DK 026/06	shrub or tree	leaves/bark	TB	skin rashes, oral candidiasis, herpes zoster, herpes simplex		[70, 80]
97		<i>Entada leptostachya</i> Harms	n.d. DK 043/06	n.d. climbing shrub or tree	root	TB			[65, 70]
98		<i>Erythrina abyssinica</i> DC.	DK 040/06	tree	bark/root	TB	skin rashes, herpes simplex, herpes zoster		[70]
99		<i>Lonchocarpus bussei</i> Harms	n.d. TMRU: 1792, 2998	tree	root bark	TB			[65]
					root	cough	diuretic		[72, 85]
100		<i>Peltophorum africanum</i> Sond.	n.d.	n.d. tree	bark	cough	gonorrhoea		[79]
			n.d.		n.d.	TB	HIV, wounds, toothache, sore throat, cough, abdominal disorders, diarrhea, menorrhagia, infertility, dysentery		[90]
101		<i>Tamarindus indica</i> L.	TMP: 155	tree	root	cough	fevers	decoction of roots	[66, 72]
102		<i>Tephrosia purpurea</i> subsp. <i>Leptostachya</i> (DC.) Brummit	TMRU:1654	herb	root	cough	tightness of the chest, as a cholagogue, diuretic, asthma, deobstruent, tonic and laxative		[85, 91]
			n.d.	n.d.	plant	bilious cough	biliary and splenic troubles		[85, 92]
103	Loganiaceae	<i>Strychnos spinosa</i> Lam.	TMP: 198	tree	stem bark	cough	stomach trouble	powdered bark	[84, 88]
104	Malvaceae	<i>Adansonia 16ysmenor</i> L.	n.d.	tree	bark	TB			[67]
105		<i>Dombeya cincinnata</i> K. Schum. (syn. <i>Dombeya acutangula</i> Cav.)	TMRU: 169, 181, 1724	tree	root	cough with chest pains	against vomiting, abdominal pains, to facilitate conception	the root decoction is drunk	[81]

S. NO.	FAMILY	PLANT NAME	VOUCHER SPECIMEN	HABIT	PART USED	CLAIM FOR RESPIRATORY DISEASE RELATED CONDITION	OTHER CLAIMS FOR DISEASE TREATMENT IN CONDITION	PREPARATION	BOOK OR JOURNAL REFERENCE
106		<i>Grewia bicolor</i> Juss. (syn. <i>Grewia damine</i> Gaertn.)	TMRU: 572	tree or shrub	root	cough	mental illness, hernia, female sterility, convulsions, vaginal and rectal prolapse	the root decoction is drunk	[81]
107		<i>Grewia microcarpa</i> K. Schum.	TMRU: 1703	shrub	root, leaves	cough		the root decoction or the leaf juice is drunk.	[81]
108		<i>Hibiscus micranthus</i> L.f.	TMRU: 2020, 3137	shrub	root	pneumonia		root decoction	[74]
109		<i>Hibiscus surattensis</i> L.	TMRU: 926	herb	leaves	severe cough		the leaves are crushed and the juice drunk	[74]
110		<i>Pavonia urens</i> Cav. JAM 1855	n.d.	herb	root	pneumonia	stomachache	honey-based poultice	[87]
111		<i>Sida rhombifolia</i> L.	TMP: 100	herb	n.d.	TB	rheumatism	an extract or an infusion of the plant	[68, 84]
112		<i>Sida serratifolia</i> R. Wilczek & Steyaert	n.d.	n.d.	leaves	pulmonary TB	diarrhoea		[79]
113		<i>Waltheria indica</i> L.	TMP: 74	tree	root	cough		decoction of the roots	[72, 89]
			n.d.	n.d.	n.d.	cough	abortifacient, emolient		[68, 89]
114	Meliaceae	<i>Trichilia emetica</i> Vahl	MJM 3066	tree	stem bark, leaves, root	TB	epilepsy, malaria, syphilis, gonorrhoea	stem bark/leaves are boiled in water and decoction administered. In the treatment of gonorrhoea and syphilis the roots are boiled together with the roots of <i>Alchonea cordifolia</i> , <i>Sapium ellipticum</i> , <i>Zenheria scabra</i> , <i>Acanthus pubescens</i> , <i>Emilia javanica</i>	[63]

S. NO.	FAMILY	PLANT NAME	VOUCHER SPECIMEN	HABIT	PART USED	CLAIM FOR RESPIRATORY DISEASE RELATED CONDITION	OTHER CLAIMS FOR DISEASE CONDITION TREATMENT IN	PREPARATION	BOOK OR JOURNAL REFERENCE
								and <i>Oxygonum sinuatum</i> and the decoction drunk.	
			n.d.	tree	leaves, bark	TB		fresh leaves boiled in water, 1 cup x 3 for TB, bark powder soaked in hot water for cough	[78]
			TMRU: 3009	tree	stem bark, root bark	whooping cough	boils	decoction of stembark and rootbark is drunk	[74]
			n.d.	tree	bark	pneumonia	jigger infections		[72, 74]
115	Menispermaceae	<i>Cissampelos pareira</i> L. var. <i>orbiculata</i> (L.) Miq. (syn. <i>Cissampelos pareira</i> L.)	TMP: 30 (101)	vine	root	cough	sore throat, cold, snake bite	roots are powdered and soak in water	[72, 84]
116	Monimiaceae	<i>Xymalos monospora</i> (Harv.) Baill.	MJM 3040	tree	leaves	cough		leaves are pounded together with ginger to make a thick paste or squeezed and the juice produced given to children for coughs	[63]
117	Moraceae	<i>Milicia excelsa</i> (Welw.) C.C. Berg	n.d.	tree	bark	pneumonia	infants fever, uterus cancer		[67]

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118	Moringaceae	<i>Moringa oleifera</i> Lam.	n.d.	tree	leaves	TB		fresh leaves boiled + lime juice + <i>Piper nigrum</i> + table salt; 1 cup x 3	[78]
119	Myricaceae	<i>Myrica salicifolia</i> Hochst. Ex A. Rich.	DK 057/06	shrub or tree	bark/root	TB	chronic diarrhea, cryptococcal meningitis, herpes simplex		[70]
			n.d.	n.d.	stem bark	cough		the powdered, dry stembark is mixed with honey and eaten	[84]
120	Myrtaceae	<i>Eucalyptus spp.</i>	n.d.	tree	n.d.	TB			[80]
			n.d.	n.d.	leaves	TB			[65]
121		<i>Psidium guajava</i> L.	DK 042/06	shrub or tree	leaves	TB	chronic diarrhea		[70]
			TMRU 3184	shrub or tree	leaves	cough and pulmonary disorders	sprains, diarrhea, intestinal haemorrhages		[68, 93]
			n.d.	n.d.	leaves	TB			[65]
122		<i>Syzygium cordatum</i> Hochst. Ex Krauss	TMRU 3166	3165, tree	plant	TB	emetic		[68, 93]
123	Phyllanthaceae	<i>Antidesma membranaceum</i> Müll.Arg.	TMRU: 3108	tree or shrub	root	pneumonia	kwasnhiorkor, mouth ulcers		[70, 72]
124		<i>Antidesma venosum</i> E.Mey ex Tul.	DK 049/06	shrub or tree	root	TB	chronic diarrhoea, oral candidiasis		[70]
			TMRU: 2309, 2904	978, tree or shrub	root	purulent cough in children	uterine prolapse, abdominal pains, dysmenorrhea, gonorrhoea, bilharzia, malaria	the root decoction is drunk	[81]
125			n.d.	tree	inner bark	cough		chew inner bark with salt	[78]

S. NO.	FAMILY	PLANT NAME	VOUCHER SPECIMEN	HABIT	PART USED	CLAIM FOR RESPIRATORY DISEASE RELATED CONDITION	OTHER CLAIMS FOR DISEASE TREATMENT IN CONDITION	PREPARATION	BOOK OR JOURNAL REFERENCE
		<i>Bridelia micrantha</i> (Hochst.) Baill.	n.d.	tree	root	TB	women's stomach ache, infertility		[67, 94]
126		<i>Flueggea virosa</i> (Roxb. Ex Willd.) Royle (syn. <i>Securinega virosa</i> (Roxb. Ex Willd.) Baill.)	TMRU: 272, 1003	tree or shrub	root	pneumonia	diarrhea		[68, 74]
			TMP: 14, 79, 105	shrub	stem bark	pneumonia	diarrhea		[68, 84]
			n.d.	n.d.	pulp	pneumonia	diarrhoea, gonorrhoea		[79]
127		<i>Margaritaria discoidea</i> (Baill.) G. L. Webster	TMRU: 1948	tree	root	cough	polymenorrhoea		[74]
128		<i>Phyllanthus amarus</i> Schumach. & Thonn.	TMRU: 3156	herb	aerial parts and leaves	persistent cough		infusion of the aerial parts is drunk and the leaves are chewed	[93]
129		<i>Pseudolachnostylis maprouneifolia</i> Pax	TMRU: 121, 1944	tree	stem bark	pneumonia	anaemia	dried stembark added to porridge	[68, 74]
130	Polygalaceae	<i>Securidaca longipedunculata</i> Fresen.	TMP: 119, 265	tree	root	cough	chest complains	decoction of roots	[89]
			n.d.	n.d.	leaves	cough		a decoction of the very young leaf made with lokal salt of vegetable origin	[68, 89]
			n.d.	tree	root bark	cough	asthma	powdered root boil in water, one teaspoon three times a day	[78]
131	Polygonaceae	<i>Rumex usambarensis</i> (Dammer) Dammer	TMRU: 3286	shrub	leaves	cough	stomach pains		[72, 95]
132	Polypodiaceae	<i>Phymatodes scolopendria</i> (Burm. F.) Ching (syn. <i>Phymatosorus scolopendria</i> (Burm. F.) Pic. Serm.)	TMRU: 2553	rhizomatus fern	leaves	pneumonia	chickenpox, oedema, enlarged spleen	decoction	[71, 77]

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133	Ranunculaceae	<i>Clematis brachiata</i> Thunb.	TMRU: 3106	woody climber	root	cough	syphilis, thrush, headaches		[68, 95]
134		<i>Clematis hirsuta</i> Guill. & Perr.	DK 051/06	herb	leaves	TB	cryptococcal meningitis, herpes zoster		[70]
135	Rhamnaceae	<i>Rhamnus prinoides</i> L'Hér.	TMRU: 3004	tree or shrub	root	pneumonia			[68, 95]
136		<i>Scutia myrtina</i> (Burm. F.) Kurz	TMP: 195	shrub	stem bark	cough	emetic, chest troubles	decoction of stem bark	[68, 89]
137		<i>Ziziphus abyssinica</i> Hochst. Ex A. Rich.	n.d.	shrub	root	pneumonia		root powder is given into skin incisions	[86]
138		<i>Ziziphus pubescens</i> Oliv.	n.d.	n.d.	leaves	pneumonia	diarrhoea, dysentery, wounds, skin diseases		[79]
139	Rubiaceae	<i>Agathisanthemum bojeri</i> Klotzsch	TMRU: 1621, 2140	herb	seeds	cough	chest problems		[68, 95]
140		<i>Chassalia violacea</i> K.Schum.	n.d.	shrub	root	pneumonia	infants complications, mental case, infertility, syphilis		[67]
141		<i>Crossopteryx febrifuga</i> (Afzel. Ex G. Don) Benth.	TMP: 162,269	tree	root	TB, cough	spasm of the stomach	decoction of the roots	[77, 89]
			SMM-BD11	tree	root bark	TB	venereal diseases	root bark is boiled in water, the decoction taken orally	[75]
			n.d.	tree	root bark	TB		root powder of <i>C. febrifuga</i> and <i>Cordia africana</i> are soaked in hot water; 1 table spoon x 3 till cure	[78]
			n.d.	n.d.	root	TB			[65]

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142		<i>Kraussia kirkii</i> (Hook. F.) Bullock	TMRU: 1293	shrub	root	cough		the dried powdered roots together with the dried powdered rootbark of <i>Carica papaya</i> L. are mixed with honey and taken internally. Pregnant women are prohibited from taking this remedy.	[95]
143		<i>Pavetta crassipes</i> K. Schum.	TMRU: 2936	tree or shrub	root and leaves	TB and cough	gonorrhoea	grind dry/fresh roots + chicken soup	[68, 78, 95]
144		<i>Rubia cordifolia</i> L.	n.d.	n.d.	root	TB			[65]
			n.d.	herb	root	cough			[78]
			n.d.	n.d.	whole plant	TB			[65]
145		<i>Tarenna littoralis</i> (Hiern) Bridson (syn. <i>Coptosperma littorale</i> (Hiern) Degreef)	TMRU: 551, 1395	tree or shrub	root	cough with chest pains	amenorrhoea	the root decoction is drunk	[93]
146		<i>Vangueria infausta</i> subsp. <i>Rotundata</i> (Robyns) Verdc. (syn. <i>Vangueria rotundata</i> Robyns)	TMP: 70, 96, 246	shrub	root	pneumonia, cough	malarial fever, roundworms, purgative		[68, 89]
147	Rutaceae	<i>Citrus limon</i> (L.) Osbeck	DK 075/06	tree	root	TB			[70]
148		<i>Fagara chalybaea</i> (Engl.)	n.d.	n.d.	root bark	cough	Diarrhea, toothache		[79]

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149		<i>Gardenia ternifolia</i> subsp. <i>Jovis-tonantis</i> (Welw.) Verdc.	TMRU: 1509, 1672, 2257	tree or shrub	root	cough	malaria, laxative		[77, 95]
150		<i>Harrisonia abyssinica</i> Oliv	TMP: 106, 129	shrub or tree	root	TB			[89]
151		<i>Teclea simplicifolia</i> (Engl.) I. Ver. (syn. <i>Vepris simplicifolia</i> (Engl.) Mziray)	TMRU: 430	tree	root	pneumonia			[68, 95]
152		<i>Toddalia asiatica</i> (L.) Lam.	TMRU: 2990	shrub	leaves	pneumonia	malaria, intermittent fever, lung diseases, toothaches, rheumatic fever, syphilis, cholera		[68, 95]
			n.d.	n.d.	root	cough	emetic, snake bites		[72, 95]
			n.d.	n.d.	fruits	cough	colds		[72, 95]
153		<i>Vepris eugeniifolia</i> (Engl.) I. Verd.	TMP: 217	tree	leaves	pneumonia	lung diseases	decoction of the leaf is administered with milk	[68, 86, 89]
154		<i>Zanthoxylum chalybeum</i> Engl.	n.d.	shrub or tree	root	TB; pneumonia		root decoction or pulp	
			TMP: 40, 50, 75, 209, 278	shrub	root	pneumonia	hookworm	decoction of roots	[77, 89]
			TMRU: 1675	shrub or tree	root	whooping cough	stomachache, strangulated hernia, schistosomiasis, skin diseases, hyper- and dysmenorrhoea, female infertility, swellings	root decoction	[95]
			TMRU: 1675	tree	stem bark	cough	malaria, colds, dizziness		[72, 95]

S. NO.	FAMILY	PLANT NAME	VOUCHER SPECIMEN	HABIT	PART USED	CLAIM FOR RESPIRATORY DISEASE RELATED CONDITION	OTHER CLAIMS FOR DISEASE TREATMENT IN CONDITION	PREPARATION	BOOK OR JOURNAL REFERENCE
			n.d.	tree	root bark	cough	asthma	powder in cold water, or powdered root in hot water; one teaspoon three times a day	[78]
155	Salicaceae	<i>Dovyalis abyssinica</i> (A. Rich.) Warb.	n.d. MJM 3033	n.d. tree	root stem bark	TB cough		the bark is boiled in water together with the leaves of <i>Abrus precarorius</i> and the decoction drunk	[65] [63]
156	Sapindaceae	<i>Allophylus ferrugineus</i> Taub.	n.d.	tree or shrub	root	coughing	stomach gas, roundworms, fever	infusion	[87]
157		<i>Deinbollia borbonica</i> Scheff.	TMRU: 2140, 2961	tree or shrub	root	cough	mental illness, hiccup, hernia, headaches, bilaharzia, gonorrhoea, stomachaches, malaria, convulsions, poliomyelitis, cardiac pains	roto decoction	[95]
158		<i>Zanha africana</i> (Radlk.) Exell	n.d.	tree	leaves	TB			[67]
159	Sapotaceae	<i>Pachystela brevipes</i> (Baker) Baill. (syn. <i>Synsepalum brevipes</i> (Baker) T.D.Penn.)	n.d. TMRU: 1134	shrub or tree tree	bark root	cough cough	asthma malaria, catarrh, aphrodisiac	lick powder twice a day	[78] [77, 81]
160		<i>Sideroxylon inerme</i> L.	TMRU: 474	tree or shrub	root	cough	conjunctivitis, hernia, paralysis		[81]

S. NO.	FAMILY	PLANT NAME	VOUCHER SPECIMEN	HABIT	PART USED	CLAIM FOR RESPIRATORY DISEASE RELATED CONDITION	OTHER CLAIMS FOR DISEASE TREATMENT IN CONDITION	PREPARATION	BOOK OR JOURNAL REFERENCE
161		<i>Synsepalum cerasiferum</i> (Welw.) T.D.Penn.	MJM 3077/3097	tree	stem bark	TB	malaria, venereal diseases, and urinary tract infections	the stem bark is boiled in water and decoction taken orally	[63]
162	Smilacaceae	<i>Smilax anceps</i> Willd. (syn. <i>Smilax kraussiana</i> Meisn.)	n.d. TMRU: 3117	herb climbing shrub	leaves root	TB cough	venereal diseases, diuretic		[67] [68, 81]
163	Solanaceae	<i>Solanum incanum</i> L.	TMP: 102 TMP: 102	shrub shrub	n.d. root leaves	pneumonia cough	pleurisy abdominal pains, liver troubles, carbuncle, colic, sore throat, gonorrhoea, syphilis snake bite, colic, sore throat, gonorrhoea, syphilis	roasted parts of the plant	[89] [68, 89]
			n.d. n.d.	n.d. n.d.	fruits plant	TB pneumonia	Ringworms, liver disease, gonorrhoea, syphilis, ear ache		[65] [79]
164	Stilbaceae	<i>Nuxia floribunda</i> Benth.	n.d.	tree	bark	pneumonia; coughing		powdered, two tbsp., three times per day	[87]
165	Verbenaceae	<i>Lantana camara</i> L.	TMP: 87 MJM 3213	shrub shrub	leaves root, leaves	cough cough	sore throat, conjunctivitis, toothache gonorrhoea, syphilis, swollen legs, to dilate vagina during labour	the ash of burnt leaves together with a little salt the root/leaves boiled together with stem bark of <i>Mangifera indica</i> and <i>Ocimum basilicum</i> and decoction taken.	[72, 89] [63]

S. NO.	FAMILY	PLANT NAME	VOUCHER SPECIMEN	HABIT	PART USED	CLAIM FOR RESPIRATORY DISEASE RELATED CONDITION	OTHER CLAIMS FOR DISEASE TREATMENT IN CONDITION	PREPARATION	BOOK OR JOURNAL REFERENCE
			n.d.	n.d.	leaves	cough	sore throat, colds, conjunctivitis, toothache		[79]
166	Vitaceae	<i>Cyphostemma adenocaula</i> (Steud. Ex A. Rich.) Desc. Ex Wild & R.B.Drumm	TMP: 16, 154 TMRU: 443, 3127	herb	leaves	pneumonia		the leaves are put on the chest as a poultice	[72, 81, 89]
167	Xanthorrhoeaceae	<i>Aloe secundiflora</i> Engl.	n.d.	succulent plant	n.d.	pneumonia	antimalarial, chest pains, disinfection, conjunctivitis		[86]
168		<i>Aloe lateritia</i> Engl.	n.d. TMRU: 2988	shrub	leaves root	TB pneumonia			[65] [74, 77]
169	Zygophyllaceae	<i>Balanites aegyptiaca</i> (L.) Delile	n.d.	tree	bark	cough		powder in hot water plus salt; one cup three times a day; or lick powder with salt	[78]

Footnote:

HIV = Human immunodeficiency virus; TB = tuberculosis

Table S2: Anti-microbial activity of plants traditionally used against infective diseases of respiratory tract in Tanzania (see Table S1)

Plants with high activity (MIC ≤ 50 µg/mL, IZD ≥ 20 mm) are in marked bold.

SNo.	FAMILY	PLANT NAME	METHOD OF ANTI-MICROBIAL ACTIVITY TEST EMPLOYED	ANTIMICROBIAL ACTIVITY OF EXTRACT	COUNTRY	BOOK OR JOURNAL REFERENCE
	Acanthaceae	<i>Acanthus pubescens</i> (Oliv.) Engl.	Agar dilution streak method	Leaf, stem, root and fruit methanol extracts: no activity against BC, MS, PA, SG, and SA at concentrations of 1000 µg/mL.	Rwanda	[96]
			Microdilution method	Root dichloromethane extract: activity against SA, SF, BA, and SAG (MIC = 6.25 mg/mL each), and against BS (MIC = 3.12 mg/mL), no activity against ST and PA; root ethyl acetate extract: activity against SA and BA (MIC = 1.6 mg/mL each), ST (MIC = 3.12 mg/mL), PA (MIC = 6.25 mg/mL), and SAG (MIC = 25.0 mg/mL), no activity against SF and BS.	Tanzania	[64]
	Amaranthaceae	<i>Achyranthes aspera</i> L.	Disc diffusion method	Leaf water extract: weak activity against PV at low dilutions. IZD =12 mm at 3000 ppm and IZD = 19 mm at 4000 ppm.	India	[97]
			Agar cup and microdilution methods (800 µg extract / well)	Root aqueous extract: activity against BL and STM (IZD = 10 mm each), and BB (IZD =12 mm), not active against PA, EC, SE, BS, and PF; MIC: no activity (MIC > 5000 µg/mL) for SE, BS, BB, PF, and STM. Methanol extract: activity against BL (IZD = 12 mm), and STM and BB (IZD = 14 mm), not active against PA, EC, SE, BS, and PF at concentrations of 20 mg/mL; MIC: activity against BB (MIC = 1000 µg/mL), and STM (MIC = 2000 µg/mL), no activity (MIC > 4000 µg/mL) for SE, BS, BB, and PF.	India	[98]
			Disc diffusion method	Root ethanol extract: at concentrations of 500 µg/mL high activity against STM, EC, and BS, moderate activity against PA and SAB; root acetone and ethyl acetate extracts: moderate activities against STM, EC, BS, and SA, no activity against SAB.	India	[99]

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			Disc diffusion method (disc diameter: 5 mm)	Herb methanol extract (10 mg/mL): activity against SA and BS (IZD = 9 mm each), and ST (IZD = 7 mm); <i>n</i> -hexane extract: activity against SA, EC, and BS (IZD = 6 mm each). Leaf chloroform extract (10 mg/mL): activity against SA and ST (IZD = 6 mm each). Inflorescence chloroform extract (10 mg/mL): activity against SA and ST (IZD = 6 mm each); <i>n</i> -hexane extract: activity against SA, EC, and BS (IZD = 8 mm each). Stem <i>n</i> -hexane extract (10 mg/mL): activity against SA, EC, and BS (IZD = 6 mm).	India	[100]
			Agar streak method	Leaf and stem methanol extracts: no activity against BS, MS, PA, SG, and SA at concentrations of 1000 µg/mL	Rwanda	[96]
			Microdilution method	Herb methanol extract: no activity against MA (MIC > 500 µg/mL) and MS (MIC > 500 µg/mL).	n.d	[101]
			Microbial inhibition assay (50 µg extract / well)	Leaf methanol extract: activity against EC (IZD = 20 mm), no activity against SA, hexane: activity against SA (IZD = 7 mm), no activity against EC.	Tonga	[102]
			Agar diffusion method	Leaf and stem ethanol (80%) extract: activity against BS and SA (MIC = 25 mg/mL), no activity against EC and PA.	India	[103]
			Agar well diffusion method (hole diameter: 10 mm)	Root water extract (50 mg/mL): activity against EC (IZD = 16 mm), no activity against SA and BS.	Somalia	[104]
			Agar well-diffusion method	Flower petroleum ether fraction: activity against SA and PA (IZD lower than standard antibiotics), PV and KP (IZD equal to the standard	Ethiopia	[105]

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			(200 µg extract / well)	antibiotics), no activity against SG and EC; dichloromethane fraction: activity against PA (IZD lower than standard antibiotics), SA (IZD equal to the standard antibiotics), no activity against SG, EC, PV, and KP; methanol fraction: activity against KP (IZD lower than standard antibiotics), PV (IZD equal to standard antibiotics), no activity against SA, SG, EC, and PA; residual water fraction: activity against SA and EC (IZD lower than standard antibiotics), no activity against SG, PV, PA, and KP; direct water extract: activity against SA (IZD lower than standard antibiotics), no activity against SG, EC, PV, PA, and KP.		
3.		<i>Chenopodium ambrosioides</i> L.	Agar dilution streak method	Leaf, stem and fruit methanol extracts: no activity against BS, MS, PA, SG and SA at concentrations of 1000 µg/mL	Rwanda	[96]
			Microplate alamar blue assay (MABA)	Leaf ethanol (80%) extract: activity against MS (MIC = 10 mg/mL), MTB (H37Ra) (MIC = 5 mg/mL), no activity against MTB (H37Rv) (MIC > 10 mg/mL).	Ghana	[106]
			Micro-titer plate dilution technique	Leaf dichloromethane:methanol (1:1) extract: activity against SA (MIC = 0.80 mg/mL), SA MR (MIC = 0.25 mg/mL), SA GMR (MIC = 0.50 mg/mL), SE (MIC = 0.50 mg/mL), and PA (MIC = 0.25 mg/mL); aqueous extract: activity against SA (MIC = 4.00 mg/mL), SA MR (MIC = 8.00 mg/mL), SA GMR (MIC = 8.00 mg/mL), SE (MIC = 16.00 mg/mL), no activity against PA (MIC > 16 mg/mL).	southern Africa	[32]
			Agar plate method	Aerial parts acetone extract: activity against MTB (H37Rv) (MIC = 0.5 mg/mL); water extract: no activity against MTB (H37Rv).	South Africa	[106]
			Microplate broth dilution method	Aerial parts <i>n</i> -hexane extract: activity against SA (MIC = 125 µg/mL), no activity against EF, KP, PA, and MS; dichloromethane extract: activity against SA, KP, and PA (MIC = 125 µg/mL each), no activity against EF and MS; ethylacetate extract: activity against SA (MIC = 250 µg/mL) and PA	Portugal	[31]

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				(MIC = 125 µg/mL), no activity against EF, KP, and MS; methanol extract: activity against SA (MIC = 31 µg/mL), no activity against EF, KP, PA, and MS.		
			Agar well-diffusion method (200 µg extract / well)	Leaf petroleum ether fraction: activity against SA, PV, and PA (IZD lower than standard antibiotics), no activity against SG, EC, and KP; dichloromethane, methanol, and residual water fractions: activity against SA (IZD lower than standard antibiotics), no activity against SG, EC, PA, PV, and KP; direct water extract: activity against SA (IZD greater than standard antibiotics), EC and PA (IZD lower than standard antibiotics), no activity against SG, PV, and KP.	Ethiopia	[105]
		<i>Dysphania ambrosioides</i> L. (syn. <i>Chenopodium ambrosioides</i> L.)	Microdilution method	Leaf essential oil: activity against SA (MIC = 256 µg/mL), and PA (MIC = 512 µg/mL).	Brazil	[107]
4.	Anacardiaceae	<i>Lannea schimperi</i> (Hoechst. ex A. Rich) Engl.	Microdilution method	Stem bark ethanol (80%) extract: activity against KP (MIC = 6.25 mg/mL) and ST (MIC = 1.6 mg/mL), no activity against EC and VC.	Tanzania	[108]
			Liquid dilution method	Stem bark methanol extract: activity against BC (MIC = 0.5 mg/mL), no activity against SA and KP; water extract: activity against BC (MIC = 1 mg/mL), no activity against SA.	Tanzania	[109]
5.		<i>Mangifera indica</i> L.	Disc diffusion method (800 µg extract / well)	Leaf water extract: activity against BB (IZD = 12 mm), no activity against PA, EC, SE, BL, BS, PF, and STM; methanol extract (20 mg/mL): activity against PF (IZD = 10 mm), BB and STM (IZD = 12 mm each), no activity against PA, EC, SE, BL, and BS.	India	[98]
			Agar disc diffusion assay (at 500 µg extract)	Leaf ethanol extract: activity against CG (IZD = 17 ± 1 mm, MIC = 250 µL/disc).	Zimbabwe	[110]

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			/disc) and microdilution method			
			BACTEC MGIT™ 960 system and disc diffusion method (15 mg extract/disc)	Root methanol extract: considerable activity against MTB H37Rv, activity against EC (IZD = 11.0 ± 0 mm, MIC = 234 µg), SA (IZD = 11.7 ± 0.3 mm, MIC = 117 µg), and CA (IZD = 12 ± 0.6 mm, MIC = 1875 µg).	Kenya	[111]
			REMA assay	Root <i>n</i> -hexane extract: no activity against MS and MU (MIC > 250 µg/mL each). Leaf <i>n</i> -hexane extract: activity against MS (MIC = 250 µg/mL), no activity against MU (MIC > 250 µg/mL).	Ghana	[112]
			Agar diffusion method	Stem bark ethanol (80%) extract: activity against SA (MIC = 25 mg/mL), no activity against BS, EC, and PA.	India	[103]
6.		<i>Ozoroa insignis</i> Delile	Microdilution method	Stem bark ethanol (80%) extract: no activity against KP, ST, EC, and VC at concentrations < 25 mg/mL.	Tanzania	[108]
7.		<i>Ozoroa mucronata</i> (Bernh.) R. Fern & A. Fern.	Microdilution method	Leaf acetone extract: activity against MB BCG (MIC = 0.625 ± 0 mg/mL), MB from field samples (MIC = 0.51 ± 0.17 mg/mL), MTB H37Ra (MIC = 0.625 ± 0 mg/mL), and MDR-TB (MIC = 0.51 ± 0.17 mg/mL).	South Africa	[113]
			n.d.	Root bark <i>n</i> -hexane extract: activity against SA and BS	Kenya	[114]
			Serial dilution assay with tetrazolium violet	Leaf crude (acetone (70%)- <i>n</i> -hexane) extract: activity against EC (MIC = 1250 µg/mL), EF (MIC = 625 µg/mL), PA (MIC = 312 µg/mL), and SA (MIC = 2500 µg/mL); <i>n</i> -hexane fraction: activity against EC (MIC = 78 µg/mL),	South Africa	[30]

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				EF (MIC = 39 µg/mL), PA (MIC = 156 µg/mL), and SA (MIC = 19 µg/mL); dichloromethane fraction: activity against EC and PA (MIC = 39 µg/mL each), EF and SA (MIC = 19 µg/mL each); ethyl acetate fraction: activity against EC (MIC = 156 µg/mL), EF and SA (MIC = 625 µg/mL each), and PA (MIC = 312 µg/mL); butanol fraction: activity against EC (MIC = 312 µg/mL), EF and SA (MIC = 1250 µg/mL each), and PA (MIC = 2500 µg/mL).		
8.		<i>Pseudospondias microcarpa</i> (A. Rich.) Engl.	Disc diffusion method	Leaf petrol ether extract (2.25 mg/disc): activity against SA (IZD = 9.0 ± 0 mm), BS (IZD = 5.5 ± 0.7 mm), and EC (IZD = 7.5 ± 2.12 mm), no activity against PA; dichloromethane extract (4 mg/disc): activity against PA (IZD = 6.5 ± 0.7 mm), no activity against SA, BS, and EC; water extract (2.5 mg/disc): no activity against SA, BS, EC, and PA.	Tanzania	[115]
9.		<i>Rhus natalensis</i> Bernh. ex C. Krauss.	Disc diffusion method (disc diameter: 6 mm)	Root hot water extract (10 g/L): activity against EC (IZD = 9.7 ± 0.5 mm), SA (IZD = 12.0 ± 0.8 mm), and BS (IZD = 9.3 ± 1.2 mm).	Kenya	[116]
10.	Annonaceae	<i>Annona senegalensis</i> Pers.	Cylinder plate technique (100 µg extract / well)	Root bark water extract: activity against SA (MIC = 1000 mg/mL, IZD = 18 mm), no activity against EC and PA; methanol extract: activity against SA (MIC = 62.5 mg/mL, IZD = 10 mm), no activity against PA and EC.	Uganda	[117]
			Disc diffusion method (0.5 mg extract / disc)	Stem bark extract: petrol fraction activity against EC (IZD = 20-25 mm), and SA (IZD > 25 mm); ether and chloroform fractions: no activity against SA and EC.	Tanzania	[118]
			REMA assay	Stem ethanol, stem bark dichloromethane, and leaf ethanol extracts: no activity against MS and MU (MIC > 250 µg/mL each). Twig ethanol extract: no activity against MS and MU (MIC > 100 µg/mL each).	Cameroon	[112]

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				Stem dichloromethane extract: activity against MS (MIC = 31 µg/mL) and MU (MIC = 250 µg/mL) .		
			Disc diffusion method (2 mg extract / disc), microdilution	Bark ethanol extract: activity against AN (IZD = 4.5 mm, MIC = 1.6 mg/mL), AI (IZD = 5.0 mm, MIC = 3.1 mg/mL), SM (IZD = 3.0 mm, MIC = 12.5 mg/mL), and PG (IZD = 6.5 mm, MIC = 1.6 mg/mL), no activity against AA (IZD = 0.0 mm), and PI (IZD = 2.5 mm).	South Africa	[119]
11.		<i>Uvaria acuminata</i> Oliv.	Disc diffusion method (0.5 mg extract / disc)	Leaf extract: ether fraction active against SA (IZD = 10 – 15 mm); petrol and chloroform fractions not active against SA. Root extract: ether fraction active against SA (IZD > 25 mm) ; petrol and chloroform fractions not active against SA.	Tanzania	[118]
12.	Apocynaceae	<i>Rauwolfia caffra</i> Sond.	Agar dilution method	Root aqueous and chloroform extracts: activity against EBC (MIC = 50 mg/mL).	South Africa	[120]
			Microdilution assay	Leaf <i>n</i> -hexane extract: activity against SA (MIC = 0.78 mg/mL), no activity against BS, EC, and KP; ethanol extract: activity against SA (MIC = 1.56 mg/mL), no activity against BS, EC, and KP; water extract: no activity against BS, EC, KP, and SA.	South Africa	[121]
			Two fold microdilution method	Root alkaloidal extract: activity against MMA and MIP (MIC = 1.25 mg/mL each); ethanol extract: activity against MMA and MIP (MIC = 2.5 mg/mL each).	Tanzania	[122]
			Micro-titer plate dilution technique	Leaf dichloromethane:methanol (1:1) extract: activity against SA (MIC = 2 mg/mL), SA MR (MIC = 4 mg/mL), SA GMR (MIC = 4 mg/mL), SE (MIC = 4 mg/mL), and PA (MIC = 2 mg/mL); aqueous extract: activity against SA (MIC = 8 mg/mL), SA MR (MIC = 8 mg/mL); SA GMR (MIC = 4 mg/mL), and SE (MIC = 16 mg/mL), no activity against PA (MIC > 16 mg/mL).	southern Africa	[32]

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			Plate-hole diffusion method	Bark methanol and water extracts: no activity against SE and SA.	South Africa	[123]
13.	Asparagaceae	<i>Asparagus africanus</i> Lam.	Broth microdilution method	Leaf ethanol extract: activity against EF (MIC = 512 µg/mL), no activity against SA, EC, and PA.	Ethiopia	[124]
			Broth microdilution method	Leaf petroleum ether extract: activity against KP (MIC = 12.50 mg/mL), MA A+ (MIC = 6.25 mg/mL), and SA (MIC = 12.50 mg/mL); dichloromethane extract: activity against KP (MIC = 12.50 mg/mL), MA A+ (MIC = 6.25 mg/mL), and SA (MIC = 12.50 mg/mL); ethanol (80%) extract: activity against KP (MIC = 6.25 mg/mL), MA A+ (MIC = 0.39 mg/mL), and SA (MIC = 6.25 mg/mL.); water extract: activity against KP (MIC = 1.56 mg/mL), MA A+ (MIC = 6.25 mg/mL), and SA (MIC = 12.50 mg/mL)	South Africa	[125]
			Agar well-diffusion method (200 µg extract / well)	Root petroleum ether and dichloromethane fractions: no activity against SA, SG, EC, PV, PA, and KP; methanol fraction: activity against SA and PA (IZD lower than standard antibiotics), no activity against SG, EC, PV, and KP; residual water fraction: activity against SA, EC, and PA (IZD lower than standard antibiotics), no activity against SG, PV, and KP; direct water extract: activity against EC and PV (IZD lower than standard antibiotics), no activity against SA, SG, PA, and KP.	Ethiopia	[105]
14.		<i>Dracaena steudneri</i> Engl.	Agar dilution streak method	Leaf and stem methanol extracts: no activity against BS, MS, PA, SG and SA at concentrations of 1000 µg/mL.	Rwanda	[96]
15.	Bignoniaceae	<i>Kigelia africana</i> (Lam.) Benth.	Liquid dilution method	Stem bark <i>n</i> -hexane extract: active against BC (MIC = 0.25 mg/mL) and SA (MIC = 0.5 mg/mL).	Tanzania	[109]

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			In vitro broth microdilution screening assay	Leaf <i>n</i> -hexane extract: activity against MS (MIC = 0.63 mg/mL); dichloromethane extract: activity against MS (MIC = 1.67 mg/mL); acetone extract: activity against MS (MIC = 0.63 mg/mL); methanol extract: activity against MS (MIC = 0.63 mg/mL).	South Africa	[126]
			Microtiter plate assay	Stembark aqueous extract: activity against EC and SA (MLC = 2.5 mg/mL each); no activity against BS and KP. Stembark ethanol extract: activity against BS (MLC = 0.63 mg/ml), EC, KP, and SA (MLC = 2.5 mg/mL each). Fruit aqueous extract: no activity. Fruit ethanol extract: activity against BS and KP (MLC = 1.25 mg/mL each). Fruit ethyl acetate extract: activity against BS (MLC = 0.313 mg/mL).	South Africa	[127]
			Well-diffusion assay (well diameter: 4 mm)	Bark methanol extract (10 mg/mL): activity against SA (IZD = 3.00 ± 0.41 mm), <i>Streptococcus</i> group A (IZD = 5.00 ± 0.41 mm), EC (IZD = 1 ± 0 mmm), PA (IZD = 3.75 ± 0.50 mm). Fruit methanol extract (10 mg/mL): activity against SA (IZD = 2.23 ± 0.50 mm), <i>Streptococcus</i> group A (IZD = 4.00 ± 0.41 mm), PA (IZD = 4.50 ± 0.58 mm), no activity against EC. Bark methanol extract (10 mg/mL): activity against <i>Streptococcus</i> group A (IZD = 2.00 ± 0.41 mm), PA (IZD = 4.00 ± 0.82 mm), no activity against SA and EC.	Zimbabwe	[128]
			Microdilution method	Bark dichloromethane:methanol extract: activity against SE (MIC = 10 µg/mL) , BBA (MIC = 80 µg/mL), PA (MIC = 250 µg/mL), PBA (MIC = 310 µg/mL), SA GMR (MIC = 1000 µg/mL), BBL, SA MR, and EC (MIC = 2000 µg/mL each), no activity against SA (MIC > 8000 µg/mL); water extract: activity against SA GMR, SA MR, SE, and EC (MIC = 4000 µg/mL each), PBA (MIC = 6000 µg/mL), BBA and SA (MIC = 8000 µg/mL each), no activity against BBL and PA (MIC > 8000 µg/mL each).	South Africa	[129]

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				Fruit dichloromethane:methanol extract: activity against BBA (MIC = 60 µg/mL), SE (MIC = 130 µg/mL), PA (MIC = 250 µg/mL), PBA (MIC = 310 µg/mL), BBL and SA GMR (MIC = 1000 µg/mL each), SA MR and EC (MIC = 2000 µg/mL each), no activity against SA; water extract: activity against PBA (190 µg/mL), BBA and SE (MIC = 250 µg/mL each), SA GMR and EC (MIC = 2000 µg/mL each), BBL (MIC = 8000 µg/mL), no activity against SA MR, SA, and PA (MIC > 8000 µg/mL each).		
			Micro-titer plate dilution technique	Fruit dichloromethane:methanol (1:1) extract: activity against SA, SA MR, and SA GMR (MIC = 4 mg/mL each), SE (MIC = 1.5 mg/mL), and PA (MIC = 2 mg/mL); water extract: activity against SA, and PA (MIC = 16 mg/mL each); no activity against SA MR, SA GMR, and SE (MIC > 16 mg/mL each).	southern Africa	[32]
			Inhibition zone (MIC)	Leaf methanol extract: activity against SA (5 mg/mL), BS (MIC = 2.5 mg/mL), EC (MIC = 5.5 mg/mL), and PA (MIC = 7.5 mg/mL). Stem bark methanol extract activity against SA (5 mg/mL), BS (MIC = 5.5 mg/mL), EC (MIC = 5.25 mg/mL), and PA (MIC = 7.5 mg/mL).	Ghana	[130]
			Disc diffusion method (20 mg/disc), microdilution method	Stem bark methanol extract: activity against EC and PA (IZD = 6.0 ± 0.0 mm each, MIC = 0.83 ± 0.0 µg/mL each), SA and ST (IZD = 0.0 ± 0.0 mm each, MIC = 0.83 ± 0.0 µg/mL each).	Cameroon	[131]
			Microdilution method	Fruit methanol extract: activity against ABB (MIC = 1874 µg/mL), AF (MIC = 1247 µg/mL), AH (MIC = 141.7 µg/mL), CF (MIC = 1814 µg/mL), EA (MIC = 236 µg/mL), EC (MIC = 176.3 µg/mL), PM (MIC = 181.4 µg/mL), PF (MIC = 187.4 µg/mL), SRM (MIC = 1572 µg/mL), BC (MIC = 1189 µg/mL), SA (MIC = 2487 µg/mL), SE (MIC = 445.4 µg/mL). Fruit water extract: activity against AF (MIC = 1786 µg/mL), AH (MIC = 1288 µg/mL), CF (MIC = 2060 µg/mL), EA (MIC = 173.7 µg/mL), EC (MIC = 84.7 µg/mL), , PM (MIC = 206.2 µg/mL), PF (MIC = 206.3 µg/mL), SRM (MIC =	Australia	[132]

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				2118 µg/mL), BC (MIC = 1974 µg/mL), SA (MIC = 4333 µg/mL), SE (MIC = 847.9 µg/mL), no activity against ABB. Fruit ethyl acetate extract: active against EA (MIC = 423.6 µg/mL), PM (MIC = 623.3 µg/mL), PF (MIC = 687.3 µg/mL), SE (MIC = 1655 µg/mL), not active against ABB, AF, AH, CF, EC, SRM, BC, and SA.		
			Micro-titer plate method	Fruit acetone extract: activity against KP (MIC = 4000 µg/mL), MC (MIC = 1000 µg/mL), MS (MIC = 4000 µg/mL), and MA (MIC = 250 µg/mL); no activity against SA (MIC > 8000 µg/mL).	Central Africa	[133]
			Serial microplate dilution method	Leaf <i>n</i> -hexane extract: activity against SA (MIC = 2.50 mg/mL), EC (MIC = 1.25 mg/mL), PA (MIC = 0.60 mg/mL), and EF (MIC = 0.30 mg/mL); dichloromethane extract: activity against SA and EC (MIC = 0.60 mg/mL each), PA (MIC = 1.25 mg/mL), and EF (MIC = 0.08 mg/mL); acetone extract: activity against SA and EC (MIC = 0.60 mg/mL each), PA (MIC = 0.10 mg/mL), and EF (MIC = 0.42 mg/mL).	South Africa	[134]
			Broth dilution method	Leaf dichloromethane extract: activity against MA (MIC = 6.25 mg/mL); ethylacetate extract: no activity against MA (MIC = 12.5 mg/mL); ethanol extract activity against MA (MIC = 6.25 mg/mL). Bark dichloromethane extract: activity against MA (MIC = 3.12 mg/mL); ethylacetate extract: no activity against MA (MIC = 12.5 mg/mL); ethanol extract activity against MA (MIC = 1.56 mg/mL).	Sudan	[135]
			Broth microdilution method	Aerial parts methanol (70%) extract: activity against PM, SRM, and KP (MIC = 1.80 mg/mL each), no activity against EC, SHF, SPT, SEN, and SA (MIC > 2.50 mg/mL each).	Togo	[136]
16.		<i>Stereospermum kunthianum</i> Cham.	Minimum inhibitory	Chewing stick methanol/dichloromethane (1:1) extract: activity against BC (MIC = 1.5 mg/mL), SA (MIC = 0.4 mg/mL), EF (MIC = 4.0 mg/mL), SM (MIC = 16 mg/mL), KP (MIC = 4.0 mg/mL), and EC (MIC = 1.0 mg/mL);	Ethiopia	[137]

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			concentration assay	water extract: activity against BC (MIC = 0.4 mg/mL), SA (MIC = 1.0 mg/mL), EF and KP (MIC = 4.0 mg/mL each), SM (MIC = 2.0 mg/mL); no activity against EC.		
			Kirby-Bauer's disc diffusion method	Leaf methanol extract: activity against EF and SA (MIC = 0.67 mg/mL each), AB (MIC = 3.41 mg/mL), CF, EA, EC, and PM (MIC = 4.27 mg/mL each), KP and PA (MIC = 9.63 mg/mL each).	India	[138]
17.	Borangiaceae	<i>Cordia africana</i> Lam.	Agar dilution method	Stem bark and leaf distilled water extract: activity against NG, SP, and SPN, no activity against BC, SA, ST, STM, SHF, SD, and EC.	Ethiopia	[139]
			Agar well diffusion	Leaf methanol (80%) extract: no activity against EC and SA.	Ethiopia	[140]
			Agar disc diffusion assay (diameter: 6 mm)	Leaf ethanol extract (100 mg/mL): activity against SA (IZD = 7.3 ± 1.15 mm), STM (IZD = 9.1 ± 1.04 mm), PA (IZD = 5 ± 1.0 mm), SHS (IZD = 8 ± 0.0 mm), and EC (IZD = 11.6 ± 0.57 mm); methanol extract (100 mg/mL: activity against SA (IZD = 5.8 ± 0.76 mm), STM (IZD = 8.5 ± 0.5 mm), PA (IZD = 4 ± 1.0 mm), SHS (IZD = 6.8 ± 0.76 mm), and EC (IZD = 12.8 ± 1.25 mm); chloroform extract (100 mg/mL: no activity against SA, STM, PA, SHS, and EC.	Ethiopia	[141]
18.		<i>Tecomaria capensis</i> (Thunb.) Spach.	Microdilution assay	Bark <i>n</i> -hexane extract: no activity against BS, EC, KP, and SA; ethanol extract: activity against SA (MIC = 3.13 mg/mL), no activity against BS, EC, and KP; water extract: no activity against BS, EC, KP, and SA.	South Africa	[121]
			Disc diffusion method (0.5 mg extract/disc)	Leaf ether extract: activity against SA (IZD = 15-20 mm) and EC (IZD = 15-20 mm); chloroform extract: no activity against SA and EC.	Tanzania	[118]
			Microplate broth dilution method	Aerial parts <i>n</i> -hexane extract: activity against PA and MS (MIC = 125 µg/mL each), and no activity against SA, EF, and KP; methanol extract:	Portugal	[31]

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				activity against SA (MIC = 250 µg/mL), no activity against EF, KP, PA, and MS.		
			Agar plate diffusion method	Leaf methanol extract (2 mg/mL): activity against EC and BC (IZD = 16±1.63 mm each), SA (IZD = 14±0.82 mm), PA (IZD = 12±0.82 mm), and EF (IZD = 15±0.41 mm).	India	[142]
			Micro-titre plate dilution assay	Leaf dichloromethane:methanol extract: activity against SM (MIC = 0.67 mg/mL), SS (MIC = 2 mg/mL), LA (MIC = 2.67 mg/mL), LC (MIC = 3.33 mg/mL), PG (MIC = 1 mg/mL), and FN (MIC = 1.3 mg/mL); water extract: activity against SM (MIC = 2 mg/mL), SS, PG, and FN (MIC = 8 mg/mL each), no activity against LA and LC. Stem dichloromethane:methanol extract: activity against SM (MIC = 2 mg/mL), SS (MIC = 4 mg/mL), PG (MIC = 1 mg/mL), and FN (MIC = 2.67 mg/mL), no activity against LA and LC; water extract: activity against SM (MIC = 2 mg/mL) and FN (MIC = 6 mg/mL), no activity against SS, LA, LC, and PG.	South Africa	[143]
19.		<i>Trichodesma zeylanicum</i> (Burm.f.) R.Br.	Broth microdilution technique	Leaf methanol (80%) extract: activity against SA, PA, and ST (MIC = 1.25 mg/mL), no activity against SP, BA, BC, KP, and EC.	Tanzania	[144]
20.	Canellaceae	<i>Warburgia salutaris</i> (Bertol.f.) Chiov.	Broth microdilution method	Leaf acetone extract: activity against MA (MIC = 0.625 mg/mL), MTB (TB8104) (MIC = 0.156 mg/mL), MS and MF (MIC = 1.25 mg/mL each).	South Africa	[145]
			Resazurin microplate assay (REMA)	Leaf acetone extract: activity against MTB (H37Ra) (MIC = 25±2 µg/mL) and MTB 2 (MIC = 25 ± 5 µg/mL) .	South Africa	[26]

SNo.	FAMILY	PLANT NAME	METHOD OF ANTI-MICROBIAL ACTIVITY TEST EMPLOYED	ANTIMICROBIAL ACTIVITY OF EXTRACT	COUNTRY	BOOK OR JOURNAL REFERENCE
			Microdilution method	Bark methanol extract: activity against KP (MIC = 1.00 mg/mL), MC (MIC = 2.00 mg/mL), PA and SA (MIC = 1.66 mg/mL each). Bark dichloromethane extract: activity against KP (MIC = 1.00 mg/mL), MC (MIC = 0.42 mg/mL), PA (MIC = 0.25 mg/mL), and SA (MIC = 0.50 mg/mL).	South Africa	[146]
			Well-diffusion assay (well diameter: 4 mm)	Bark methanol extract (10 mg/mL): activity against SA (IZD = 5.00 ± 0.82 mm), <i>Streptococcus</i> group A (IZD = 3.00 ± 0.41 mm), no activity against EC and PA. Leaf methanol extract (10 mg/mL): activity against SA (IZD = 2 ± 0 mm), PA (IZD = 2 ± 0.82 mm), no activity against <i>Streptococcus</i> group A and EC. Root methanol extract (10 mg/mL): activity against SA (IZD = 5.50 ± 0.41 mm), <i>Streptococcus</i> group A (IZD = 9.50 ± 0.58 mm), EC (IZD = 3.5 ± 0.58 mm), and PA (IZD = 2 ± 0.41 mm).	Zimbabwe	[128]
			Micro-titer plate dilution technique	Bark dichloromethane:methanol (1:1) extract: activity against SA (MIC = 0.40 mg/mL), SA MR, SE, and SA GMR (MIC = 0.50 mg/mL each), and PA (MIC = 0.10 mg/mL); aqueous extract: activity against SA, SA MR, SA GMR (MIC = 4.0 mg/mL, each), and SE (MIC = 8.0 mg/mL), no activity against PA (MIC > 16 mg/mL). Leaf dichloromethane:methanol (1:1) extract: activity against SA (MIC = 0.8 mg/mL), SA MR (MIC = 2.0 mg/mL), SA GMR (MIC = 0.50 mg/mL), SE and PA (MIC = 1.0 mg/mL each); aqueous extract: activity against SA and SA MR (MIC = 4.0 mg/mL), SA GMR (MIC = 8.0 mg/mL), and SE (MIC = 16.0 mg/mL), no activity against PA (MIC > 16 mg/mL).	southern Africa	[32]
			Micro-titre plate dilution assay	Leaf dichloromethane:methanol extract: activity against SM and LA (MIC = 1 mg/mL each), SS (MIC = 1.67 mg/mL), LC (MIC = 2 mg/mL), PG (MIC = 8 mg/mL), and FN (MIC = 3.33 mg/mL); aqueous extract: active against SM and PG (MIC = 8 mg/mL each), FN (MIC = 4 mg/mL), no activity against SS, LA and LC.	South Africa	[143]

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				<p>Bark dichloromethane:methanol extract: activity against SM and SS (MIC = 2 mg/mL each), LA (MIC = 1.33 mg/mL), LC (MIC = 0.42 mg/mL), PG (MIC = 0.83 mg/mL), and FN (MIC = 4 mg/mL); aqueous extract: activity against SM (MIC = 6 mg/mL), SS and LC (MIC = 8 mg/mL each), PG (MIC = 2 mg/mL), and FN (MIC = 1 mg/mL), no activity against LA.</p> <p>Twigs dichloromethane:methanol extract: activity against SS, LA and PG (MIC = 1.33 mg/mL each), LS (MIC = 1 mg/mL) and FN (MIC = 2 mg/mL), no activity against SM; aqueous extract: activity against SS, LA, and FN (MIC = 8 mg/mL), and PG (MIC = 4 mg/mL), no activity against SM and LC.</p>		
			Broth microdilution method	Stem bark ethanol (80%) extract: activity against EF (MIC = 512 µg/mL), and SA (MIC = 256 µg/mL), no activity against EC and PA.	Uganda	[147]
			Plate-hole diffusion method	Bark methanol and water extracts: no activity against SE and SA.	South Africa	[148]
21.		<i>Warburgia ugandensis</i> Sprague	Disc-diffusion method (5 mg extract / disc)	Leaf freeze-dried methanol extract: activity against EC and SA (IZD = 9 mm), VS (IZD = 10 mm), and BC (IZD = 8 mm), air-dried methanol extract: EC, SA and VS (IZD = 10 mm), BC (IZD = 8 mm), both extracts no activity against ST, PA, PM, and SHF.	Tanzania	[149]
			Paper disc assay, agar assay	Stem water extract: no activity against SA and EC in paper disc assay, activity against SA and EC in agar assay; petroleum ether and ethanol extracts: no activity against SA and EC in both assays.	Uganda	[150]
			Agar dilution method	Leaf methanol extract (2000 µg/mL): activity against BC, NG, and SA no activity against SP, SPN ST, SHF, STM, SD, and EC.	Ethiopia	[139]

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				Stem bark methanol extract (2000 µg/mL): activity against BC, NG, and SA no activity against SP, SPN ST, SHF, STM, SD, and EC.		
22.	Cannabaceae	<i>Trema orientalis</i> (L.) Blume	Minimum inhibitory concentration	Bark aqueous extract: activity against KP and BS (MIC = 0.625 mg/mL each), PA and PV (MIC = 1.25 mg/mL each), SA and EC (MIC = 2.5 mg/mL each).	India	[151]
			Broth microdilution method	Leaf acetone extract: activity against MS and MTB (MIC = 0.312 mg/mL each), MF (MIC = 0.625 mg/mL), and MA (MIC = 1.25 mg/mL).	South Africa	[145]
23.	Capparaceae	<i>Boscia angustifolia</i> A. Rich	Liquid dilution method	Stem bark <i>n</i> -hexane extract: activity against BC (MIC = 0.5 mg/mL) and SA (MIC = 1 mg/mL).	Tanzania	[109]
			Microtitre dilution technique	Bark methanol (80%) extract: activity against SA, BS, ST, EC, and PA (MIC = 3.75 mg/50 µL each).	Kenya	[152]
			Antimycobacteria susceptibility test (BACTEC MGIT™ 960 system)	Bark methanol extract: activity against MK (501 GUs at 0.5 mg/mL extract, 0 GUs at 1 mg/mL), MTB (183 GUs at 0.5 mg/mL, 0 GUs at 1 mg/mL), MF (618 GUs at 0.5 mg/mL, 0 GUs at 1 mg/mL), slight activity against MS (13,801 GUs at 0.5 mg/mL, 120 GUs at 1 mg/mL, 9 GUs at 2 mg/mL).	Kenya	[153]
24.		<i>Cadaba farinosa</i> Forssk.	Agar diffusion technique	Leaf dichloromethane extract: activity against SA and BC (MIC = 500 µg/mL each), and MCF (MIC = 250 µg/mL), no activity against EC, and PA; methanol extract: activity against BC (MIC = 250 µg/mL), and MCF (MIC = 1000 µg/mL), no activity against SA, EC, and PA; water extract: no activity against SA, BC, MCF, EC, and PA.	Yemen	[36]

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25.		<i>Capparis erythrocarpos</i> Isert	Agar well diffusion assay (well diameter: 10 mm) + serial dilution methods	Leaf petroleum ether (250 mg/mL): activity against EC (IZD = 25.3±1.53 mm , MIC = 320 µg/mL), SA (IZD 26.3±0.58 mm , MIC = 400 µg/mL), and PA (IZD = 13.0±0.00 mm, MIC = 500 µg/mL); methanol extract (250 mg/mL): activity against SA (IZD = 10.3±0.58 mm, MIC = 530 µg/mL), no activity against EC and PA (IZD = 0.0±0.00 mm each, MIC > 1600 µg/mL each).	Uganda	[154]
26.		<i>Capparis tomentosa</i> Lam.	Disc diffusion method (3 mg extract / disc) + microdilution method	Bark acetone extract: activity against SE MR (IZD = 19 mm, MIC = 0.312 mg/mL), SA MR (IZD = 23 mm , MIC = 0.312 mg/mL), EC (IZD = 5 mm, MIC = 0.625 mg/mL), and EBC (IZD = 7 mm, MIC = 0.625 mg/mL); <i>n</i> -hexane extract: activity against SE MR (IZD = 22 mm , MIC = 0.156 mg/mL), SA MR (IZD = 25 mm , MIC = 0.156 mg/mL), EC (IZD = 8 mm, MIC = 0.625 mg/mL), and EBC (IZD = 6 mm, MIC = 0.625 mg/mL); methanol extract: activity against SE MR (IZD = 26 mm , MIC = 0.078 mg/mL), SA MR (IZD = 30 mm , MIC = 0.078 mg/mL), not active against EC and EBC; water extract: no activity against SE MR, SA MR, EC, and EBC.	South Africa	[155]
			Broth microdilution method	Root ethanol (70%) extract: activity against MTB H37Rv (MIC = 125 µg/mL), no activity against MS ATCC 607, MTB H37Ra, MS mc ² , MB BCG, MBA DSM 44156, and MBA DSM 44157.	Mozambique	[156]
			Plate-hole diffusion method	Root methanol and water extracts: no activity against SE and SA.	South Africa	[148]
27.	Celastraceae	<i>Elaeodendron buchananii</i> (Loes.) Loes.	Broth microdilution method	Stem bark <i>n</i> -hexane extract: no activity against SA (MIC = 250 µg/mL), and SP, SAL, EC, VC, SD, and NM; ethyl acetate extract: activity against SA and NM (MIC = 15.62 µg/mL each) , SP and EC (MIC = 62.5 µg/mL each), SAL (MIC = 31.25 µg/mL) , no activity against VC (MIC = 125 µg/mL), and SD (MIC = 250 µg/mL); methanol extract: no activity against SA, SAL, and EC (MIC = 125 µg/mL each), SP, VC, and SD (MIC = 250 µg/mL each), and NM (MIC > 500 µg/mL).	Kenya	[34]

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				According to the authors, values of > 62.5 µg/mL were considered not active.		
28.		<i>Maytenus senegalensis</i> (Lam.) Excell.	Microdilution method	Stem bark ethanol extract: activity against KP and EC (MIC = 12.5 mg/mL each), ST (MIC = 6.25 mg/mL), and VC (MIC = 0.8 mg/mL).	Tanzania	[108]
			In vitro broth microdilution screening assay	Leaf <i>n</i> -hexane extract: activity against MS (MIC = 0.104 mg/mL); dichloromethane extract: no activity against MS; acetone extract: activity against MS (MIC = 0.523 mg/mL); methanol extract: activity against MS (MIC = 1.25 mg/mL).	South Africa	[126]
			Agar plate method	Aerial parts acetone extract: activity against MTB (H37Rv) (MIC = 0.5 mg/mL), water extract: no activity against MTB. Root acetone and water extracts: no activity against MTB (H37Rv).	South Africa	[106]
29		<i>Gymnosporia senegalensis</i> (Lam.) Loes (syn. <i>Maytenus senegalensis</i> (Lam.) Excell.)	Microdilution assay	Root petroleum ether extract: activity against BS (MIC = 0.39 µg/mL) , EC and KP (MIC = 1.56 µg/mL each) , and SA (MIC = 6.25 µg/mL) ; dichloromethane extract: activity against BS and SA (MIC = 0.78 µg/mL each) , EC (MIC = 3.13 µg/mL) , and KP (MIC = 1.56 µg/mL) ; ethanol extract: activity against EC (MIC = 0.10 µg/mL) , BS and KP (MIC = 1.56 µg/mL each) , and SA (MIC = 0.78 µg/mL each) ; water extract: activity against BS, EC, KP, and SA (MIC = 3.13 µg/mL each) .	South Africa	[24]
			Well-diffusion assay (well diameter: 4 mm)	Leaf methanol extract (10 mg/mL): activity against SA (IZD = 2.50 ± 0.41 mm), <i>Streptococcus</i> group A (IZD = 3.00 ± 0.71 mm), EC (IZD = 4.50 ± 0.58 mm), and PA (IZD = 5.00 ± 0.82 mm). Root methanol extract (10 mg/mL): activity against SA (IZD = 5.13 ± 0.63 mm), <i>Streptococcus</i> group A (IZD = 2 ± 0 mm), EC (IZD = 4.00 ± 0.41 mm), and PA (IZD = 1 ± 0 mm).	Zimbabwe	[128]

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				Twig methanol extract (10 mg/mL): activity against SA (IZD = 4.00 ± 0.41 mm), <i>Streptococcus</i> group A and EC (IZD = 2 ± 0 mm each), and PA (IZD = 7.00 ± 0.41 mm).		
30.	Chrysobalanaceae	<i>Parinari curatellifolia</i> Planch. ex Benth.	Zone of inhibition (20 mg extract / hole), MIC	Stem aqueous extract (100 mg/mL): activity against SA (IZD = 8.20 ± 0.06 mm, MIC = 3.125 mg/mL), SAU (IZD = 6.53 ± 0.03 mm, MIC = 6.25 mg/mL), SP (IZD = 6.73 ± 0.07 mm, MIC = 12.5 mg/mL), SM (IZD = 8.00 ± 0.06 mm, MIC = 6.25 mg/mL), and BS (IZD = 9.10 ± 0.06 mm, MIC = 25.00 mg/mL); ethanol extract (100 mg/mL): activity against SA (IZD = 17.63 ± 0.09 mm, MIC = 6.25 mg/mL), SAU (IZD = 16.2 ± 0.09 mm, MIC = 12.50 mg/mL), SP (IZD = 14.90 ± 0.06 mm, MIC = 25 mg/mL), SM (IZD = 18.20 ± 0.06 mm, MIC = 25 mg/mL), and BS (IZD = 11.30 ± 0.06 mm, MIC = 25.00 mg/mL).	Nigeria	[157]
			Broth microdilution method	Aerial parts methanol (70%) extract: activity against PM, SRM, SHF, and SPT (MIC = 1.80 mg/mL each), no activity against EC, SEN, KP, and SA (MIC > 2.50 mg/mL each).	Togo	[136]
			Agar diffusion method	Stem water extract (2.8 g/100 mL): activity against PA and BAU (IZD = 25 mm each), ST (IZD = 27 mm), Klebsiella spp. (IZD = 28 mm), EC (IZD = 20 mm), BS (IZD = 29 mm), and SA (IZD = 36 mm) ; methanol extract (2.8 g/100 mL): activity against PA (IZD = 16 mm), ST and EC (IZD = 14 mm each), <i>Klebsiella</i> spp. (IZD = 13 mm), BAU (IZD = 19 mm), BS (IZD = 21 mm), and SA (IZD = 20 mm) ; <i>n</i> -hexane and diethylether extracts (2.8 g/100 mL each) showed no activity against PA, SP, <i>Klebsiella</i> spp, BAU, EC, BS, and SA.	Nigeria	[158]
			Disc diffusion method (2 mg extract / disc), microdilution	Bark ethanol extract: active against AN (IZD = 4.6 mm, MIC = 1.6 mg/mL), AI (IZD = 2.5 mm, MIC = 1.6 mg/mL), SM (IZD = 3.6 mm, MIC = 6.3 mg/mL), AA (IZD = 0.0 mm, MIC = 12.5 mg/mL), and PG (IZD = 2.4 mm, MIC = 3.1 mg/mL), not active against and PI (IZD = 3.0 mm).	South Africa	[159]

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			Agar disc diffusion assay (500 µg extract / disc)	Stem ethanol extract: activity against MA (IZD = 18 ± 1 mm at 500 µg/disc, MIC = 8 µL/disc) and CG (IZD = 13 ± 1 mm at 500 µg/disc, MIC = 125 µL/disc). Leaf ethanol extract: activity against MA (IZD = 18 ± 1 mm at 500 µg/disc, MIC = 63 µL/disc).	Zimbabwe	[110]
			Plate-hole diffusion method	Bark methanol and water extracts: no activity against SE and SA.	South Africa	[148]
31.	Combretaceae	<i>Combretum collinum</i> Fresen.	Microplate alamar blue assay (MABA)	Leaf ethanol extract: no activity against MS (MIC > 1 mg/mL) and MTB (H37Rv) (MIC > 1 mg/mL), weak activity against PBA (MIC = 0.5 mg/mL).	South Africa	[160]
32.		<i>Combretum fragrans</i> F. Hoffm.	Agar diffusion method (200 µL)	Root methanol extract (50 mg/mL): activity against <i>Sarcina</i> sp. (IZD = 29 mm, MIC = 7.3 mg/mL), SA (IZD = 26 mg/mL) , EA (IZD = 30 mm) , SE (IZD = 22 mm) , BS (IZD = 23 mm) , and ML (IZD = 38 mm) , no activity against EC (IZD = 0 mm). Leaf methanol extract (50 mg/mL): activity against SA and BS (IZD = 22 mg/mL each) , EA (IZD = 20 mm) , SE (IZD = 18 mm), ML (IZD = 34 mm) , and <i>Sarcina</i> sp. (IZD = 21 mm), no activity against EC (IZD = 0 mm).	Tanzania	[161]
33.		<i>Combretum Sond.</i> <i>zeyheri</i>	Agar diffusion method (10 mg extract / test)	Fruit methanol extract: activity against SA, EA, SE, and BS (IZD = 18 mm each), and <i>Sarcina</i> sp. (IZD = 15 mm), no activity against EC and ML (IZD = 0 mm each). Root methanol extract: activity against SA (IZD = 22 mm) , EA (IZD = 23 mm) , SE (IZD = 16 mm), BS (IZD = 19 mm), ML (IZD = 28 mm) , and <i>Sarcina</i> sp. (IZD = 20 mm), no activity against EC (IZD = 0 mm).	Tanzania	[161]

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				Stem bark methanol extract: activity against SE (IZD = 20 mm) , BS (IZD = 18 mm), ML (IZD = 33 mm) , and Sarcina sp. (IZD = 24 mm) , no activity against EC (IZD = 0 mm).		
			Broth dilution method	Leaf alkaloid extract: activity against MS (MIC = 125 µg/mL).	Zimbabwe	[162]
			Microplate method	Leaf methanol extract: activity against EC and BS (MIC = 10 ± 0.5 mg/mL each); water extract: activity against EC (MIC = 18.8 ± 0.7 mg/mL), and BS (MIC = 37 ± 0.5 mg/mL).	Zimbabwe	[163]
34.		<i>Terminalia kilimandscharica</i> Engl.	Broth dilution method	Bark methanol (70%) extract: activity against ML (MIC = 100 mg/mL), BC (MIC = 15.6 mg/mL), PA (MIC = 75 mg/mL), and EC (MIC = 150 mg/mL).	Kenya	[164]
35.	Compositae (Asteraceae)	<i>Ageratum conyzoides</i> (L.) L.	Tetrazolium microplate assay	Whole plant methanol (80%) extract: weak activity against MTB (H37Rv) (MIC = 1.6 mg/mL).	Malaysia	[165]
			REMA assay	Leaf n-hexane extract: no activity against MS and MU (MIC > 250 µg/mL each).	Ghana	[112]
			Well diffusion method	Leaf methanolic extract: no activity against SA BS6a, SA BS11, SA BS12, SA BS14, EC BS3, EC VT7b PA SH2b, <i>Proteus</i> spp. JH1a, JH5a, and SH9a, and <i>Shigella</i> spp. BS16.	Nigeria	[166]
			Agar well diffusion method	Leaf methanol (95%) extract: no activity against SA, SE, BC, EC, PA, and KP.	India	[167]
			Disc diffusion method (100 µg/disc)	Leaf methanol/chloroform extract: activity against SA (IZD = 19.5 ± 2.4 mm), EC (IZD = 8.1 ± 0.5 mm), no activity against BS, ST, EA, and BBS; water extract: no activity against SA, EC, BS, ST, EA, and BBS.	Pakistan	[168]

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			(500 µg extract / disc)			
			Disc diffusion method	Leaf petrol ether extract (1.75 mg/disc): no activity against SA, BS, EC, and PA; dichloromethane extract (4 mg/disc): no activity against SA, BS, EC, and PA; water extract (5 mg/disc): activity against SA (IZD = 20 ± 0 mm), BS (IZD = 10 ± 0 mm), and EC (IZD = 46.00 ± 1.41 mm) , no activity against PA.	Tanzania	[115]
41.		<i>Vernonia cinerea</i> (L.) Less	Agar diffusion method (1 mg extract / test)	Leaf <i>n</i> -hexane extract: activity against SA (IZD = 10 ± 0.76 mm, MIC = 1.56 mg/mL), EC (IZD = 11.0 ± 0.57 mm, MIC = 6.25 mg/mL), KP (IZD = 11.8 ± 1.83 mm; MIC = 3.13 mg/mL), PA (IZD = 9.6 ± 0.44 mm, MIC = 3.13 mg/mL), PV (IZD = 10.5 ± 0.50 mm, MIC = 3.13 mg/mL); chloroform extract: active against SA (IZD = 10 ± 0.28 mm, MIC = 3.13 mg/mL), BC (IZD = 12.6 ± 1.36 mm, MIC = 6.25 mg/mL), EC (IZD = 12.0 ± 0.50 mm, MIC = 3.13 mg/mL), KP (IZD = 11.7 ± 0.72 mm, MIC = 3.13 mg/mL), PA (IZD = 12.8 ± 0.72 mm, MIC = 3.13 mg/mL), PV (IZD = 12.0 ± 0.28 mm, MIC = 1.56 mg/mL); ethyl acetate extract: active against SA (IZD = 10.2 ± 0.44 mm, MIC = 6.25 mg/mL), BC (IZD = 13.0 ± 0.76 mm, MIC = 3.13 mg/mL), EC (IZD = 13.5 ± 2.02 mm, MIC = 3.13 mg/mL), KP (IZD = 12.8 ± 0.44 mm, MIC = 3.13 mg/mL), PA (IZD = 12.7 ± 0.72 mm, MIC = 6.25 mg/mL), PV (IZD = 12.8 ± 1.09 mm, MIC = 3.13 mg/mL).	Nigeria	[172]
			Agar diffusion method	Plant hot water extract: activity against SM serotype c (MT 5091) and serotype d (OMZ 176) (MIC = 46.9 mg/mL each).	Taiwan	[173]
			Disc diffusion method (one seed per test)	Seed: activity against PC (IZD = 1 mm), no activity against BS, EC, and STM.	India	[174]
			Agar diffusion method	Leaf and stem ethanol (80%) extract: activity against EC, PA, and SA (MIC = 25 mg/mL each) and BS (MIC = 12.5 mg/mL).	India	[103]

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			Disc diffusion assay (250 µg extract / disc), agar and broth dilution methods	Aerial part methanol extract: activity against SA and MM (IZD = 8 mm each, MIC = 6.25 mg/mL each), PA and EA (IZD = 10 mm each, MIC = 3.13 mg/mL each), CF (IZD = 14 mm, MIC = 6.25 mg/mL), EC (IZD = 12 mm, MIC = 3.13 mg/mL), AC (IZD = 13 mm, MIC = 6.25 mg/mL), ABA (IZD = 14 mm, MIC = 6.25 mg/mL), BL and <i>Micrococcus</i> spp. (IZD = 12 mm each, MIC = 6.25 mg/mL each), SE (IZD = 9 mm, MIC = 3.13 mg/mL), <i>Erwinia</i> spp. (IZD = 12 mm, MIC = 3.13 mg/mL), BC (IZD = 17 mm, MIC = 3.13 mg/mL), SRM (IZD = 11 mm, MIC = 3.13 mg/mL), SSP (IZD = 10 mm, MIC = 6.25 mg/mL), YE (IZD = 13 mm, MIC = 3.13 mg/mL), SHS (IZD = 15 mm, MIC = 3.13 mg/mL), no activity against KP, ST, and BS; chloroform extract: activity against SA, BL, and <i>Micrococcus</i> spp. (IZD = 11 mm each, MIC = 6.25 mg/mL each), PA, EC, BC, and SHS (IZD = 11 mm each, MIC = 3.13 mg/mL each), CF (IZD = 10 mm, MIC = 6.25 mg/mL), AC, ABA, and MM (IZD = 12 mm each, MIC = 6.25 mg/mL each), SE, <i>Erwinia</i> spp and YE (IZD = 10 mm each, MIC = 3.13 mg/mL each), SRM (IZD = 8 mm, MIC = 3.13 mg/mL), SSP (IZD = 9 mm, MIC = 6.25 mg/mL), EA (IZD = 11 mm, MIC = 12.5 mg/mL), no activity against KP, ST, and BS. More activities of diethyl ether, ethyl acetate, and butanol extracts against stated microorganisms see reference.	Malaysia	[175]
			Microdilution method	Leaf methanol extract: activity against BC and SA (MIC = 0.31 mg/mL each), and EA (MIC = 0.62 mg/mL).	India	[176]
42.		<i>Vernonia colorata</i> (Willd.) Drake var. <i>colorata</i>	Microplate alamar blue assay (MABA)	Root ethanol extract: activity against MTB (H37Rv) (MIC = 0.5 mg/mL), no activity against PBA (MIC > 0.5 mg/mL).	South Africa	[160]
			Microplate broth dilution method	Aerial parts <i>n</i> -hexane extract: activity against SA (MIC = 125 µg/mL) and no activity against EF, KP, PA, and MS; dichloromethane extract: activity against SA (MIC = 125 µg/mL), EF (MIC = 250 µg/mL), and MS (MIC = 31 µg/mL) , no activity against KP and PA; ethylacetate extract: activity	Mozambique	[31]

SNo.	FAMILY	PLANT NAME	METHOD OF ANTI-MICROBIAL ACTIVITY TEST EMPLOYED	ANTIMICROBIAL ACTIVITY OF EXTRACT	COUNTRY	BOOK OR JOURNAL REFERENCE
				against SA and MS (MIC = 125 µg/mL each), no activity against EF, KP, and PA: methanol extract: activity against SA (MIC = 62.5 µg/mL), EF (MIC = 250 µg/mL), and MS (MIC = 125 µg/mL), no activity against KP and PA.		
43		<i>Vernonia hildebrandtii</i> Vatke	Disc diffusion method (0.5 mg extract/disc)	Leaf and stem extract: ether fraction active against SA (IZD = 10-15 mm); chloroform fraction active against SA (IZD = 10-20 mm) ; petrol fraction not active against SA.	Tanzania	[118]
44.	Convolvulaceae	<i>Ipomoea biflora</i> (L.) Pers. (syn. <i>Ipomoea sinensis</i> (Desr.) Choisy)	Agar-well diffusion method (10 mg extract / well)	Not specified methanol extract: activity against BC (IZD = 7 mm), BS and PA (IZD = 3 mm each), BM and KP (IZD = 5 mm), SA and EF (IZD = 6 mm each), ST (IZD = 10 mm, MIC = 2 mg/mL), no activity against SE, ML, EC, and SPT.	India	[177]
45.	Costaceae	<i>Costus afer</i> Ker Gawl.	Agar well diffusion method (0.3 mL/well)	Stem sap: activity against EC (IZD = 10.00 ± 1.56 mm), SA (IZD = 11.33 ± 1.33 mm), BS (IZD = 12.67 ± 0.88 mm), and PA (IZD = 8.66 ± 0.66 mm). Leaf sap: activity against EC (IZD = 9.33 ± 0.33 mm), SA (IZD = 10.00 ± 0.58 mm), BS (IZD = 9.67 ± 0.33 mm), and PA (IZD = 7.33 ± 0.33 mm).	Nigeria	[178]
46.	Crassulaceae	<i>Bryophyllum pinnatum</i> (Lam.) Oken	Broth dilution technique	Leaf ethanol extract: activity against SA ATCC 25923 (MIC = 0.78 mg/mL), SA1 (MIC = 1.56 mg/mL), SA2 and PM (MIC = 3.12 mg/mL each), EC ATCC25922 (MIC = 6.25 mg/mL), EC1, EC2 and KP1 (MIC = 12.5 mg/mL each); methanol extract: activity against SA ATCC 25923, and SA1 (MIC = 1.56 mg/mL each), SA2, EC ATCC25922 and PM (MIC = 3.12 mg/mL each), EC1 and KP1 (MIC = 12.5 mg/mL each), EC2 (MIC = 25 mg/mL).	India	[179]
			Agar well diffusion assay (5 mg extract / well)	Leaf methanol extract: resistant against MTB, activity against SA (IZD = 3 mm), no activity against EC, KP, PA, and ST; <i>n</i> -hexane fraction: sensitive against MTB at 25 µg/mL , no activity against SA, EC, KP, PA, and ST; dichloromethane fraction: sensitive against MTB at 25 µg/mL , activity	Nigeria	[27]

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			and proportion method	against EC and ST (IZD = 5 mm), KP (IZD = 3 mm), PA (IZD = 7 mm) all at 5 mg, no activity against SA; ethyl acetate fraction: sensitive against MTB at 40 µg/mL, resistant at 25 µg/mL, activity against SA (IZD = 17 mm), EC (IZD = 19 mm), KP (IZD = 20 mm) , PA (IZD = 23 mm) , and ST (IZD = 20 mm) all at 5 mg; water extract: sensitive against MTB at 40 µg/mL, resistant at 25 µg/mL, activity against SA (IZD = 9 mm), and PA (IZD = 10 mm), no activity against EC, KP, and ST.		
			Micro dilution method	Whole plant methanol extract: activity against SA (MIC = 256 µg/mL), PA (MIC = 512 µg/mL), and SP (MIC = 64 µg/mL); ethyl acetate extract: activity against SA (MIC = 64 µg/mL), PA (MIC = 128 µg/mL), and SP (MIC = 32 µg/mL) ; <i>n</i> -hexane extract: activity against SA (MIC = 512 µg/mL), PA (MIC = 1024 µg/mL), and SP (MIC = 256 µg/mL).	Cameroon	[53]
47.	Dennstaedtiaceae	<i>Pteridium aquilinum</i> (L.) Kuhn	Agar well method	Leaf ethanol extract (100 µg/mL): activity against EC, PV; and BS (IZD = 18 mm each), SA (IZD = 20 mm) , no activity against PA; petroleum ether extract (100 µg/mL): activity against EC and PV (IZD = 16 mm), SA (IZD = 20 mm) , BS (IZD = 22 mm) , no activity against PA; methanol and chloroform extracts (100 µg/mL): no activity against EC, SA, PV, BS, and PA.	India	[180]
48.	Ebenaceae	<i>Diospyros mespiliformis</i> Hochst. ex DC.	Disc diffusion method (0.5 mg extract/disc)	Leaf extract: ether and chloroform fractions active against SA (IZD = 10-15 mm each); petrol fraction not active against SA and EC.	Tanzania	[118]
			Cup plate agar diffusion method (2 mg extract /	Leaf water extract: no activity against MS; methanol extract: activity against MS (IZD = 12 ± 0.35 mm, MIC = 167 µg/mL). Root water extract: no activity against MS; methanol extract: activity against MS (IZD = 21.3 ± 0.50 mm) , MIC = 250 µg/mL).	Nigeria	[181]

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			hole) and agar-diffusion method			
			Disc diffusion method (20 µL extract / disc)	Root petroleum ether extract: activity against SA NCTC 6571, SA E3T, and EC (IZD: ++ each), and PA (IZD: +); chloroform extract: activity against SA NCTC 6571, SA E3T (IZD: +++ each), EC and PA (IZD: ++).	Nigeria	[46]
49.		<i>Euclea divinorum</i> Hiern.	Disc diffusion method (2 mg extract / disc), microdilution	Bark and leaf ethanol extract: activity against AN (IZD = 5.5 mm, MIC = 6.2 mg/mL), AI (IZD = 4.6 mm, MIC = 12.5 mg/mL), SM (IZD = 6.0 mm, MIC = 25.0 mg/mL), AA (IZD = 0.0 mm, MIC = 6.3 mg/mL), and PG (IZD = 6.5 mm, MIC = 3.1 mg/mL), no activity against PI (IZD = 0.0 mm).	South Africa	[159]
			Disc-diffusion method (4 mg extract/disc), broth micro-dilution assay	Root methanol extract: activity against SA and multiresistant strains SE 847 (IZD = 24 mm each) , BC (IZD = 12 mm), MCF (IZD = 18 mm), EC (IZD = 11 mm), PA (IZD = 15 mm), SH 535 (IZD = 16 mm), and SA NGR (IZD = 26 mm) ; hot water extract: activity against SA (IZD = 16 mm), and multiresistant SE 847 (IZD = 12 mm), and SA NGR (IZD = 20 mm) , not active against BC, MCF, EC, PA, and multiresistant strain SH 535.	Yemen	[182]
			Agar dilution method	Fruit methanol extract (2000 µg/mL): activity against NG, no activity against BC, SP, SPN SA, ST, STM, SHF, SD, and EC. Leaf methanol extract (2000 µg/mL): activity against NG, no activity against BC, SP, SPN SA, ST, STM, SHF, SD, and EC.	Ethiopia	[139]
50.	Euphorbiaceae	<i>Acalypha</i> <i>fruticosa</i> Forssk.	Disc diffusion method (0.5 mg extract /disc)	Leaf extract: chloroform fractions active against SA (IZD = 10-20 mm) and not active against EC; ether and petrol fractions not active against SA and EC.	Tanzania	[118]

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51.		<i>Croton dichogamus</i> Pax	Two fold microdilution method	Stem bark ethanol extract: activity against MMA and MIP (MIC = 1.25 mg/mL each).	Tanzania	[169]
52.		<i>Euphorbia heterochroma</i> Pax	Agar well-diffusion method (200 µg extract / well)	Milky exudate petroleum ether fraction: activity against SA, SG, PA and KP (IZD lower than standard antibiotics for all four cases), no activity against EC and PV; dichloromethane fraction (1000 µg/mL): activity against SA (IZD greater than standard antibiotics), SG, PA, and KP (IZD lower than standard antibiotics), no activity against EC and PV; methanol fraction (1000 µg/mL): activity against SA (IZD lower than standard antibiotics), no activity against SG, EC, PV, PA, and KP; residual water fraction (1000 µg/mL): activity against EC (IZD lower than standard antibiotics), no activity against SA, SG, , PV, PA, and KP; direct water extract (1000 µg/mL): activity against SA, EC, PV, and KP (IZD lower than standard antibiotics), PA (IZD equal to the standard antibiotics), no activity against SG.	Ethiopia	[105]
53.		<i>Euphorbia hirta</i> L.	Well diffusion antimicrobial activity (5 µg extract/well)	Leaf/stem methanol extract: activity against PA and SA ATC29213 (IZD = 0.5 cm each), and BS (IZD = 1.0 cm); medium activity against SA NCRL, poor activity against EC.	Uganda	[183]
			Agar well diffusion method (10 µg extract / well) and LRP assay	Leaf methanol extract: activity against BS (IZD = 15 mm), EC (IZD = 20 mm) , and VC (IZD = 10 mm), no activity against SA and EF, 32.02% reduction of MTB H37Rv at 250 µg/mL; <i>n</i> -hexane extract: no activity against BS, SA, EC, VC, and EF, 10.57% reduction of MTB H37Rv at 250 µg/mL; ethyl acetate extract: activity against BS (IZD = 12 mm) and EF (IZD = 10 mm), no activity against SA, EC, and VC, 42.24% reduction of MTB H37Rv at 250 µg/mL.	India	[184]

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			Disc diffusion method (0.5 mg extract /disc)	Whole plant extract: chloroform fraction active against SA (IZD = 15-20 mm); ether and petrol fractions not active against SA.	Tanzania	[118]
54.		<i>Jatropha curcas</i> L.	Tetrazolium microplate assay	Leaf methanol (80%) extract: weak activity against MTB (H37Rv) (MIC = 1.6 mg/mL).	Malaysia	[165]
			REMA assay	Leaf <i>n</i> -hexane extract: no activity against MS and MU (MIC > 250 µg/mL each).	Ghana	[112]
			Agar well method (10 mg extract / well)	Leaf methanol extract (50 mg/mL): activity against SA (IZD = 19.3 ± 1.2 mm), SRM (IZD = 17.3 ± 0.6 mm at 10 mg/mL), BS (IZD = 14.0 ± 0 mm), MP (IZD = 12.0 ± 0 mm); <i>n</i> -hexane extract (50 mg/mL): activity against SA (IZD = 13.0 ± 0 mm), SRM (IZD = 14.3 ± 1.2 mm at 10 mg/mL), BS (IZD = 15.0 ± 0 mm), MP (IZD = 14.3 ± 0.6 mm); ethyl acetate extract (50 mg/mL): activity against SA (IZD = 21.3 ± 0.3 mm), SRM (IZD = 19.0 ± 1.0 mm at 10 mg/mL), BS (IZD = 21.7 ± 0.6 mm), MP (IZD = 24.3 ± 1.2 mm).	Philippines	[184]
			Tetrazolium microplate assay	Leaf and stem ethanol (95%) extract: activity against MTB H37Rv (MIC = 200 µg/mL).	Peru	[185]
			Disc diffusion method	Leaf petrol ether extract (3.75 mg/disc): activity against SA and PA (IZD = 8.5 ± 0.7 mm each), BS (IZD = 7.0 ± 0.0 mm), no activity against EC; dichloromethane extract (3.25 mg/disc): activity against EC (IZD = 14.5 ± 0.7 mm), no activity against SA, BS, and PA; water extract (2.125 mg/disc): activity against SA (IZD = 40 ± 0 mm), BS (IZD = 8.5 ± 0.7 mm), EC (IZD = 39 ± 0 mm), and PA (IZD = 15.00 ± 1.41 mm).	Tanzania	[115]
			Agar well diffusion method	Seed water and ethanol extracts (50 mg/mL): no activity against SA, BS, and EC.	Somalia	[104]

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			(hole diameter: 10 mm)			
			Microbial percent inhibition assay (50 µg extract / well)	Leaf methanol extract: activity against SA (IZD = 2 mm), no activity against EC; hexane: activity against EC (IZD = 1 mm), no activity against SA.	Tonga	[102]
55.		<i>Mallotus oppositifolius</i> (Geiseler) Müll. Arg.	Disc diffusion assay (6 mg extract/disc), agar dilution assay	Leaf methanol extract: activity against EC 25922, EC 35922, and PA 27853 (IZD = 16 mm each, MIC ≥ 10 mg/mL each), EA 29751 and EBC HGY18 (IZD = 19 mm each, MIC ≥ 10 mg/mL each), EA 13048, KP HGY6 (IZD = 14 mm each, MIC ≥ 10 mg/mL each), KP HGY19 and AB HGY13 (IZD = 18 mm each, MIC ≥ 10 mg/mL each), KO U103 and SRM HGY4 (IZD = 15 mm each, MIC ≥ 10 mg/mL each), SMR HYG10 (IZD = 13 mm, MIC ≥ 10 mg/mL), AB HGY12 (IZD = 17 mm, MIC ≥ 10 mg/mL), EH 9790 (IZD = 17 mm, MIC = 1.25 mg/mL), <i>Enterococcus</i> sp. P054 (IZD = 20 mm, MIC = 2.5 mg/mL each), SA 25923 and SA U127 (IZD = 26 mm each, MIC = 2.5 mg/mL each), SSP (IZD = 26 mm, MIC ≤ 0.3 mg/mL). Seed methanol extract: activity against EC 25922 (IZD = 15 mm, MIC = 5 mg/mL), EC 35922 and EBC HGY18 (IZD = 13 mm each, MIC ≥ 10 mg/mL each), EA 29751 and SMR HYG10 (IZD = 11 mm each, MIC = 10 mg/mL each), EA 13048 (IZD = 12 mm, MIC ≥ 10 mg/mL), KP HGY19 (IZD = 11 mm, MIC ≥ 10 mg/mL), KP HGY6 (IZD = 9 mm, MIC ≥ 10 mg/mL), KO U103 (IZD = 10 mm, MIC ≥ 10 mg/mL), SRM HGY4 (IZD = 13 mm, MIC = 10 mg/mL), PA 27853 (IZD = 14 mm, MIC = 10 mg/mL), AB HGY13 (IZD = 17 mm, MIC = 2.5 mg/mL), AB HGY12 (IZD = 17 mm, MIC = 5 mg/mL), EH 9790 (IZD = 18 mm, MIC = 5 mg/mL), <i>Enterococcus</i> sp. P054 and SA U127 (IZD = 20 mm each, MIC = 1.25 mg/mL each), SA 25923 (IZD = 22 mm, MIC ≤ 0.3 mg/mL), and SSP (IZD = 25 mm, MIC ≤ 0.3 mg/mL).	Cameroon	[186]

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			Disc-diffusion (1 mg/disc) and microdilution assays	<p>Root petroleum ether extract: no activity against EC, ML, KP, SA, and BS; dichloromethane extract: no activity against EC, ML, KP, SA, and BS; ethanol (80%) extract: activity against EC (IZD = 0.80 ± 0.01 mm, MIC = 0.39 mg/mL), and SA (IZD < 0.1 mm, MIC = 1.56 mg/mL), no activity against ML, KP, and BS.</p> <p>Leaf petroleum ether extract: activity against ML (IZD = 0.16 ± 0.00 mm, MIC = 0.195 mg/mL), SA (IZD = 1.89 ± 0.27 mm, MIC < 0.098 mg/mL), and BS (IZD = 0.40 ± 0.01 mm, MIC = 1.560 mg/mL), no activity against EC and KP; dichloromethane extract: activity against EC (bacteriostatic effect, MIC = 3.125 mg/mL), ML (IZD = 0.36 ± 0.01 mm, MIC = 6.250 mg/mL), SA (IZD = 2.36 ± 0.01 mm, MIC < 0.098 mg/mL), and BS (IZD = 0.43 ± 0.01 mm, MIC = 0.780 mg/mL), no activity against KP; ethanol (80%) extract: activity against EC (bacteriostatic effect, MIC = 1.560 mg/mL), ML (IZD = 0.48 ± 0.03 mm, MIC = 0.780 mg/mL), SA (IZD = 0.50 ± 0.00 mm, MIC = 0.390 mg/mL), and BS (IZD = 0.36 ± 0.02 mm, MIC = 0.780 mg/mL), no activity against KP.</p>	Nigeria	[187]
56.		<i>Ricinus communis</i> L	Disc diffusion method (0.5 mg extract /disc)	Root extract: ether fraction active against SA (IZD = 10 – 15 mm); petrol and chloroform fractions not active against SA.	Tanzania	[118]
			REMA assay	Leaf <i>n</i> -hexane extract: activity against MS (MIC = 125 µg/mL), no activity against MU (MIC > 250 µg/mL).	Ghana	[112]
57.		<i>Sapium ellipticum</i> (Hochst.) Pax (syn. <i>Shirakiopsis elliptica</i> (Hochst.) Esser)	Standard broth dilution method	Stem bark water extract: activity against SL and KP (MIC = 6.2 mg/mL); ethyl acetate extract: activity against SL and KP (MIC = 12.5 mg/mL).	Tanzania	[188]
			Microdilution assay	Stem bark methanol extract: activity against clinical isolates of EC (MIC = 8 mg/mL), PA (MIC = 4 mg/mL), PS (MIC = 1 mg/mL), PV (MIC = 2 mg/mL), and SSP (MIC = 0.12 mg/mL).	Cameroon	[189]

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			Agar well diffusion technique (10 mg extract/well)	Leaf water extract: activity against SE (IZD = 17 mm), PM (IZD = 25 mm) , PA (IZD = 14 mm), and EC (IZD = 16 mm); ethanol extract: activity against SE (IZD = 24 mm) , PM (IZD = 32 mm) , PA (IZD = 30 mm) , and EC (IZD = 38 mm) ; methanol extract: activity against SE (IZD = 34 mm) , PM (IZD = 4 mm), PA (IZD = 13 mm), and EC (IZD = 19 mm); hexane, chloroform, and diethyl ether extracts: no activity against SE, PM, PA, and EC at conc. between 3.01-100 mg/mL.	Nigeria	[190]
58.		<i>Spirostachys africana</i> Sond.	Microdilution assay	Root/stem <i>n</i> -hexane extract: no activity against BS, EC, KP, and SA; ethanol extract: activity against SA (MIC = 3.13 mg/mL), no activity against BS, EC, and KP; water extract: no activity against BS, EC, KP, and SA.	South Africa	[121]
			Micro-dilution technique	Stem bark ethanol extract: activity against SA, VC, and SHD (MIC = 156 µg/mL each), SHF (MIC = 312 mg/mL), and SHB (MIC = 625 µg/mL), no activity against ST, EC, and SHS (MIC > 625 µg/mL each).	South Africa	[54]
			Microdilution assay	Bark petroleum ether extract: activity against EC (MIC = 0.10 µg/mL) , BS (MIC = 0.78 µg/mL) , KP (MIC = 1.56 µg/mL) , and SA (MIC = 0.39 µg/mL) ; dichloromethane extract: activity against BS (MIC = 3.13 µg/mL) , EC and KP (MIC = 1.56 µg/mL each) , and SA (MIC = 3.13 µg/mL) ; ethanol extract: activity against SA (MIC = 0.01 µg/mL) , BS (MIC = 0.20 µg/mL) , EC and KP (MIC = 1.56 µg/mL each) ; water extract: activity against BS (MIC = 0.39 µg/mL) , EC (MIC = 0.78 µg/mL) , KP (MIC = 1.56 µg/mL) , and SA (MIC = 0.78 µg/mL) .	South Africa	[24]
59.	Lamiaceae	<i>Plectranthus barbatus</i> Andrews (syn. <i>Coleus barbatus</i> (Andrews) Benth. Ex G. Don, syn.	Disc diffusion method	Leaf petrol ether extract (3.25 mg/disc): activity against SA (IZD = 10.0 ± 1.41 mm), BS (IZD = 7.0 ± 0.0 mm), and PA (IZD = 19.00 ± 1.41 mm), no activity against EC; dichloromethane extract (1.75 mg/disc): activity against PA (IZD = 21.00 ± 1.41 mm) , no activity against SA, BS, and EC;	Tanzania	[115]

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		<i>Plectranthus comosus</i> Sims)		water extract (1.5 mg/disc): activity against SA (IZD = 14.00 ± 1.41 mm), BS (IZD = 9.00 ± 2.82 mm), no activity against EC, and PA.		
			Agar well diffusion method (12.5 mg extract/well)	Root hot water extract: activity against SA (IZD = 18.67 ± 1.20 mm) and BS (IZD = 25.33 ± 0.88 mm), no activity against EC (IZD < 8.00 mm).	Kenya	[191]
			Proportion method	Stem and root ethanol (95%) extracts: no activity against MTB.	Rwanda	[192]
60.		<i>Hoslundia opposita</i> Vahl.	Liquid dilution method	Leaf methanol extract: activity against BC (MIC = 0.5 mg/mL), no activity against SA.	Tanzania	[109]
			Well-diffusion antimicrobial activity (5 µg extract/well)	Leaf/stem methanol extract: activity against SA ATC29213, SA NCRL, SE, SF, and BS (IZD = 1.0 cm each).	Uganda	[183]
61.		<i>Hyptis pectinata</i> (L.) Poit.	Agar plate diffusion assay (2 mg extract/hole)	Whole plant methanol extract: activity against SA (IZD = 6 mm), and BS (IZD = 9 mm), no activity against EC and PA.	Mexico	[193]
62.		<i>Ocimum suave</i> Willd.	Agar dilution streak method	Leaf and stem methanol extracts: no activity against BS, MS, PA, SG and SA at concentration of 1000 µg/mL.	Rwanda	[194]
			Agar well diffusion method (12.5 mg extract/well)	Leaf hot water extract: no activity against SA, BC, and EC (IZD < 8.0 mm).	Kenya	[191]

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			Well-diffusion antimicrobial activity (5 µg extract/well)	Leaf/stem/root methanol extract: activity against SE (IZD = 0.5 cm); medium activity against BS.	Uganda	[183]
			Microbroth dilution	Leaf/stem/flower chloroform extract: activity against SA (MIC = 62 µg/mL), and SF (MIC = 125 µg/mL), EC (MIC = 500 µg/mL), and PA (MIC = 500 µg/mL); petroleum ether extract: activity against EC (MIC = 250 µg/mL), PA (MIC = 250 µg/mL), SA and SF (MIC = 500 µg/mL each).	Uganda	[183]
			Broth dilution method	Essential oil from leaves and terminal branchlets: activity against EC (MIC = 900 µg/mL), ML (MIC = 700 µg/mL), SA (MIC = 800 µg/mL), and SC (MIC = 500 µg/mL).	Tanzania	[195]
63.		<i>Ocimum gratissimum</i> L. (syn. <i>Ocimum suave</i> Willd.)	Agar disc diffusion method (impregnation with 300 mg extract/mL), BACTEC MGIT™ 960 system	Plant methanol extract: activity against MK, MTB, MF, and MS (complete inhibition at a conc. of 2 mg/mL), ST and SA (IZD = 8.66 mm each), EC (IZD = 7 mm), PA (IZD = 7.66 mm), and KP (IZD = 6.66 mm).	Kenya	[196]
64.	Leguminosae (Fabaceae)	<i>Abrus precatorius</i> L.	Microplate alamar blue assay (MABA)	Aerial parts and seeds ethanol extract: activity against MS (MIC = 1 mg/mL), MTB (H37Rv) (MIC = 0.25 mg/mL), no activity against PBA (MIC > 0.5 mg/mL).	South Africa	[160]
			Broth microdilution method	Not specified methanol extract: weak activity against MTB (MIC = 1838 µg/mL), high activity against MB (MIC = 500 µg/mL).	Nigeria	[197]

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			Disc diffusion method (disc diameter: 6 mm)	Leaf hot water extract (10 g/L): activity against EC (IZD = 6.3 ± 1.3 mm), SA (IZD = 15.7 ± 0.5 mm), and BS (IZD = 8.7 ± 1.3 mm). Bark hot water extract (10 g/L): activity against EC (IZD = 7.2 ± 0.8 mm), SA (IZD = 10.8 ± 1.0 mm), and BS (IZD = 10.7 ± 1.2 mm),	Kenya	[116]
			Agar diffusion method	Leaf ethanol (80%) extract: activity against SA (MIC = 25 mg/mL each), no activity against EC, PA, and BS.	India	[103]
			Disc assay (4 mg extract / disc)	Root ethanol (70%) extract: activity against SA (IZD = 9 ± 1 mm), BS (IZD = 12 ± 1 mm), BM (IZD = 8 ± 1 mm), EC (IZD = 2 – 19 mm for four strains), PA (IZD = 10 – 14 mm for two strains), PP (IZD = 4 ± 0 mm), KPC (IZD = 15 ± 2 mm), and CG (5 ± 1 mm); petroleum ether fraction: activity against SA (IZD = 6 ± 0 mm), BS (IZD = 8 ± 1.0 mm), BM (IZD = 7 ± 0 mm), EC (IZD = 0 – 9 mm for four strains), PP (IZD = 9 ± 1 mm), KPC (IZD = 10 ± 1.5 mm), and CG (6 ± 1 mm), no activity against PA (IZD = 0 mm for two strains); chloroform fraction: activity against SA (IZD = 14 ± 2 mm), BS (IZD = 11 ± 1 mm), BM (IZD = 7 ± 0 mm), EC (IZD = 8-14 mm for four strains), PA (IZD = 7-9 mm for two strains), PP (IZD = 10 ± 0 mm), KPC (IZD = 10 ± 1 mm), CG (5 ± 1 mm); ethanol fraction: activity against SA (IZD = 14 ± 1 mm), BS (IZD = 9 ± 1 mm), BM (IZD = 7 ± 1 mm), EC (IZD = 5-13 mm for four strains), PA (IZD = 1-6 mm for two strains), PP (IZD = 6 ± 1 mm), KPC (IZD = 5 ± 1 mm), and CG (7 ± 1 mm); distilled water fraction: activity against SA (IZD = 1 ± 0 mm), BS (IZD = 2 ± 0 mm), BM (IZD = 1 ± 0 mm), EC (IZD = 1-6 mm for four strains), PP (IZD = 1 ± 0 mm), and KPC (IZD = 1 ± 0 mm), no activity against CG and two strains of PA (IZD = 0 mm each).	India	[198]
			Antimicrobial sensitivity test	Root ethanol extract: sensitive against SA, EC, and SAE, non-sensitive against SP and KP. Stem bark ethanol extract: sensitive against SA, EC, and SP, non-sensitive against KP and SAE.	Nigeria	[199]

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				Leaf ethanol extract: sensitive against SA, SAE, and KP, non-sensitive against EC and SP.		
65.		<i>Acacia brevispica</i> Harms	Liquid dilution method	Leaf <i>n</i> -hexane extract: activity against BC (MIC = 0.5 mg/mL), no activity against SA and KP; methanol extract: weak activity against BC (MIC = 1 mg/mL), no activity against SA.	Tanzania	[109]
66.		<i>Acacia mellifera</i> (M. Vahl) Benth.	Disc diffusion method (0.5 mg extract /disc)	Stem bark extract: ether fraction active against SA (IZD = 10-15 mm); chloroform and petrol fractions not active against SA.	Tanzania	[118]
			Agar dilution method	Whole plant <i>n</i> -hexane extract (20 mg/mL): activity against SP (IZD = 13 mm), SA (IZD = 10 mm), EC (IZD = 18 mm), no activity against PF and KP; ethyl acetate extract (20 mg/mL): activity against SP (IZD = 12 mm), EC (IZD = 10 mm), no activity against SA, PF and KP; ethanol extract (20 mg/mL): activity against SP (IZD = 15 mm), SA (IZD = 13 mm), EC (IZD = 36 mm), no activity against PF and KP; methanol extract (20 mg/mL): activity against SP (IZD = 14 mm), SA (IZD = 10 mm), PF (IZD = 12 mm), KB (IZD = 18 mm), and EC (IZD = 20 mm).	India	[200]
67.		<i>Acacia nilotica</i> (L.) Delile	Disc diffusion method (0.5 mg extract /disc)	Whole plant extract: petrol fraction active against SA and EC (IZD = 20-25 mm each); ether and chloroform fractions active against SA (IZD = 10-15 mm) and not active against EC.	Tanzania	[118]
		(see also Rather et al., 2015 for more information)	Microtitre dilution technique	Bark methanol (80%) extract: activity against SA, BS, ST, EC (MIC = 1.875 mg/50 µL each), and PA (MIC = 0.9375 mg/50 µL).	Kenya	[152]
			Antimycobacteria I susceptibility test (BACTEC)	Stem bark methanol extract: slight activity against MK (3656 GUs at 1 mg/mL extract, 0 GUs at 2 mg/mL), MTB (19,613 GUs at 1 mg/mL, 0 GUs	Kenya	[153]

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			MGIT™	960	at 2 mg/mL), activity against MF (0 mg/mL at 0.5 mg/mL), MS (0 GUs at 0.5 mg/mL).	
			Antitubercular activity		Fruit methanol (70%) extract: activity against MTB BCG strain (MIC = 1250 µg/mL); gradient column chromatographic separation of extract → fractions:FR.1 (100% <i>n</i> -hexane): activity against MTB BCG strain (MIC = 1468 µg/mL), FR.2, FR.3, FR.4: activity against MTB BCG strain (MIC = 78 µg/mL each), FR.5: activity against MTB BCG strain (MIC = 156 µg/mL), FR.6 (most polar): activity against MTB BCG strain (MIC = 312 µg/mL).	Nigeria [201]
			Agar diffusion technique		Leaf dichloromethane extract: activity against SA and BC (MIC = 1000 µg/mL each), no activity against MCF, EC, and PA; methanol extract: activity against SA (MIC = 500 µg/mL), BC (MIC = 250 µg/mL), and MCF (MIC = 1000 µg/mL), no activity against EC and PA; water extract: activity against SA, BC, and MCF (MIC = 500 µg/mL each), and PA (MIC = 1000 µg/mL), no activity against EC.	Yemen [36]
			Bacteria assay on agar plates		Root methanol extract: activity against BC, BP, BS, MCK, SA, and EBC (MIC = 0.5 mg/mL each), EA, EC, and PV (MIC = 1 mg/mL each), and SRM (MIC = 5 mg/mL); acetone extract: activity against BC, BP, BS, MCK, SA, EBC, and EA (MIC = 0.5 mg/mL each), EC (MIC = 1 mg/mL), and PV (MIC = 5 mg/mL), no activity against SRM; water extract: activity against BC (MIC = 0.5 mg/mL), BP, BS, MCK, SA, and EBC (MIC = 1 mg/mL each), and EA (MIC = 50 mg/mL), no activity against EC, PV, and SRM.	Zimbabwe [202]
			Agar dilution method		Seed methanol extract (2000 µg/mL): activity against NG, no activity against BC, SA SP, SPN ST, SHF, STM, SD, and EC.	Ethiopia [139]

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68.		<i>Acacia polyacantha</i> Willd. (syn. <i>Acacia polyacantha</i> subsp. <i>campylacantha</i>)	Micro-titre plate dilution assay	Leaf dichloromethane:methanol extract: activity against SM (MIC = 2.67 mg/mL), SS (MIC = 1 mg/mL), PG and FN (MIC = 1 mg/mL each), no activity against LA; water extract: activity against SS (MIC = 3 mg/mL), PG and FN (MIC = 8 mg/mL each), no activity against SM, LA, and LC. Stem dichloromethane:methanol extract: activity against SM and FN (MIC = 2.67 mg/mL each), SS (MIC = 1 mg/mL), and PG (MIC = 0.5 mg/mL), no activity against LA and LC; water extract: activity against SM and SS (MIC = 2 mg/mL each), PG (MIC = 8 mg/mL), FN (MIC = 4 mg/mL), no activity against LA and LC.	South Africa	[143]
69.		<i>Afrormosia angolensis</i> (Baker) de Wild. (syn. <i>Pericopsis angolensis</i> (Baker) Meeuwen)	Well diffusion assay	Bark cold water extract: activity against <i>Shigella</i> spp. (MIC = 1.526 mg/mL), ST and EC (MIC = 0.781 mg/mL each), ethanol extract: activity against <i>Shigella</i> spp. (MIC = 12.5 mg/mL), ST (MIC = 0.196 mg/mL), and EC (MIC = 0.098 mg/mL); water extract obtained by the traditional extraction method: activity against <i>Shigella</i> spp. (MIC = 0.0915 mg/mL), ST (MIC = 0.781 mg/mL), no activity against EC.	Zimbabwe	[203]
70.		<i>Afzelia quanzensis</i> Welw.	Plate-hole diffusion method	Bark methanol and water extracts: no activity against SE and SA.	South Africa	[148]
71.		<i>Albizia anthelmintica</i> Brongn.	Micro-titre dilution technique	Root/bark methanol (80%) extract: activity against SA (MIC = 1.875 mg/50 μ L), BS, ST, EC (MIC = 3.75 mg/50 μ L each), and PA (MIC = 1.875 mg/50 μ L).	Kenya	[152]
			Antimycobacteria I susceptibility test (BACTEC MGIT™ 960 system)	Bark methanol extract: slight activity against MK (1,702 GUs at 1 mg/mL extract, 0 GUs at 2 mg/mL), activity against MTB (1,603 GUs at 0.5 mg/mL, 0 GUs at 1 mg/mL), MF (701 GUs at 0.5 mg/mL, 0 GUs at 1 mg/mL), and MS (14,761 GUs at 0.5 mg/mL, 0 GUs at 1 mg/mL).	Kenya	[196]

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			Microplate serial dilution method	Root ethanol extract: activity against MA (MIC = 0.156 mg/mL). Leaf ethanol extract: activity against MA (MIC = 0.625 mg/mL).	Botswana	[204]
			Disc diffusion method (disc diameter: 6 mm)	Bark hot water extract (10 g/L): activity against EC (IZD = 6.3 ± 0.3 mm), SA (IZD = 6.8 ± 0.3 mm), and BS (IZD = 11.3 ± 1.8 mm).	Kenya	[116]
72.		<i>Albizia versicolor</i> Oliv.	Microdilution method	Bark dichloromethane:methanol extract: activity against BBA, SE, EC, PA (MIC = 1000 µg/mL each), SA MR (MIC = 2000 µg/mL), SA GMR (MIC = 3000 µg/mL), and PBA (MIC = 8000 µg/mL); not active against BBL and SA (MIC > 8000 µg/mL each). Bark aqueous extract: activity against PBA (MIC = 130 µg/mL), PA (MIC = 2000 µg/mL), SA MR (MIC = 8000 µg/mL); no activity against BBA, BBL, SA GMR, SA, EC (MIC > 8000 µg/mL each).	South Africa	[129]
			Two-fold serial dilution microplate method	Leaf acetone extract: no activity against EC, EF, and PA (MIC > 6.3 mg/mL).	South Africa	[205]
			Plate-hole diffusion and broth microdilution methods	Bark methanol extract: no activity against SE and SA; water extract: activity against SE (MIC = 3.25 mg/mL), no activity against SA.	South Africa	[148]
73.		<i>Bauhinia reticulata</i> DC.	Disc diffusion method (0.5 mg extract /disc)	Whole plant extract: petrol fraction active against SA (IZD = 15-20 mm), and EC (IZD = 10-15 mm); ether fraction active against EC (IZD = 15-20 mm)	Tanzania	[118]

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				mm) and not active against SA; chloroform fraction not active against SA and EC.		
74.		<i>Cajanus cajan</i> (L.) Druce	Liquid dilution streak method	Leaf methanol extract: activity against BS, MS and SA, no activity against PA and SG at concentrations of 1000 µg/mL. Stem methanol extract: no activity against BS, MS, PA, SG and SA at concentrations of 1000 µg/mL.	Rwanda	[96]
			Disc diffusion method	Leaf methanol extract: strong activity against NG, NM, weak activity against SP, no activity against SA at concentrations of 1000 µg/mL.	Rwanda	[206]
			Tetrazolium microplate assay	Leaf and stem ethanol (95%) extract: activity against MTB H37Rv and MDR MTB (MIC = 100 µg/mL each).	Peru	[185]
			Serial two-fold dilution method	Leaf ethanol (80%) extract: activity against SE, SA, BS, and PV (MIC = 2.50 mg/mL each), PA (MIC = 10 mg/mL), no activity against EC (MIC > 20 mg/mL); supercritical fluid extract: activity against SE, SA, and PV (MIC = 0.039 mg/mL each), BS (MIC = 0.02 mg/mL), PA and EC (MIC > 2.5 mg/mL each).	China	[207]
			Micro-broth dilution method	Leaf ethanol (95%) extract: activity against SE, SA, and BS (MIC = 2.50 mg/mL each); chloroform fraction: activity against SE, SA, and BS (MIC = 1.25 mg/mL).	China	[208]
			Disc diffusion method (1 seed per test)	Seed: activity against BS (IZD = 4 mm), EC and PC (IZD = 2 mm each), and STM (IZD = 1 mm).	India	[174]
75.		<i>Cassia abbreviata</i> Oliv.	Broth microdilution method	Stem bark water and organic extracts: hot ethanol extract activity against NG (MIC = 46.88 µg/mL), PA (MIC = 93.75 µg/mL), and KP (187.5 µg/mL); water extract: activity against NG and PA (MIC = 93.75 µg/mL each), no activity against KP; trichloromethane extract: activity against KP (MIC = 46.88	Zambia	[25]

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				$\mu\text{g/mL}$), no activity against NG and PA; dichloromethane and water extracts: activity against NG, PA, and KP (93.75 $\mu\text{g/mL}$ each); cold ethanol extract: activity against NG (MIC = 46.88 $\mu\text{g/mL}$), PA (MIC = 93.75 $\mu\text{g/mL}$), no active against KP; cold water extract: activity against NG (MIC = 93.75 $\mu\text{g/mL}$), PA (MIC = 46.88 $\mu\text{g/mL}$), no activity against KP.		
			Microplate broth dilution method	Stem bark <i>n</i> -hexane extract: activity against KP (MIC = 250 $\mu\text{g/mL}$) and MS (MIC = 62.5 $\mu\text{g/mL}$ each), no activity against SA, EF, and PA; dichloromethane extract: activity against EF and KP (MIC = 250 $\mu\text{g/mL}$ each) and MS (MIC = 62.5 $\mu\text{g/mL}$ each), no activity against SA and PA; ethylacetate extract: activity against EF and KP (MIC = 250 $\mu\text{g/mL}$ each), and MS (MIC = 31 $\mu\text{g/mL}$) , no activity against SA and PA; methanol extract: activity against SA (MIC = 15 $\mu\text{g/mL}$) , EF (MIC = 250 $\mu\text{g/mL}$), KP and PA (MIC = 125 $\mu\text{g/mL}$ each), and MS (MIC = 31 $\mu\text{g/mL}$) .	Mozambique	[31]
			Disc diffusion method (0.5 mg extract /disc)	Root extract: ether fraction active against SA (IZD = 15-20 mm) ; petrol and chloroform fractions not active against SA.	Tanzania	[118]
			Well-diffusion assay (10 mg/mL)	Bark methanol extract (10 mg/mL): activity against SA (IZD = 3.00 \pm 0.41 mm), <i>Streptococcus</i> group A (IZD = 4.50 \pm 0.58 mm), no activity against EC and PA. Leaf methanol extract (10 mg/mL): activity against <i>Streptococcus</i> group A (IZD = 2.00 \pm 0.00 mm), no activity against SA, EC and PA. Root methanol extract (10 mg/mL): activity against SA (IZD = 1.50 \pm 0.41 mm), <i>Streptococcus</i> group A (IZD = 2.13 \pm 0.63 mm), PA (IZD = 3.00 \pm 0.41 mm), no activity against EC.	Zimbabwe	[128]
			Bacteria assay on agar plates	Bark methanol extract: activity against BC and EA (MIC = 1 mg/mL each), BP, BS, MCK, SA, and EBC (MIC = 0.5 mg/mL each), EC, PV, and SRM (MIC = 5 mg/mL each); acetone extract: activity against BC and EBC (MIC = 1	Zimbabwe	[202]

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				mg/mL), BP, BS, MCK, and SA (MIC = 0.5 mg/mL each), EA, EC, and PV (MIC = 5 mg/mL each), no activity against SRM; water extract: activity against BP, MCK, and SA (MIC = 1 mg/mL each), BS, and EBC (MIC = 5 mg/mL each), no activity against BC, EBC, EC, PV, and SRM.		
76.		<i>Cassia mimosoides</i> L. (syn. <i>Chamaecrista mimosoides</i> (L.) Greene)	Agar well diffusion method (2.5 mg extract/well)	Whole plant chloroform extract: activity against SA (IZD = 15.32 ± 0.52 mm); methanol extract: activity against SA (IZD = 14.50 ± 0.52 mm); water extract: activity against SA (IZD = 30.00 ± 1.46 mm) .	Kenya	[209]
			Liquid dilution method	Whole plant ethanol (80%) extract: activity against MF (MIC = 10 mg/mL), SA and SP (MIC = 5 mg/mL), not active against EC, KP, PV, PA, and SPT (MIC > 10 mg/mL).	Rwanda	[210]
			Diffusion method (10 mg extract/disc)	Leaf ethanol extract: activity against EC (IZD = 6.0 mm), <i>Salmonella</i> spp. (IZD = 3.0 mm), and <i>Shigella</i> spp (IZD = 1.0 mm); water extract: activity against SA and <i>Salmonella</i> spp. (IZD = 2.0 mm each), <i>Shigella</i> spp. (IZD = 4.0 mm).	Nigeria	[211]
77.		<i>Cassia singueana</i> Delile (syn. <i>Senna singueana</i> (Delile) Lock)	Disc diffusion method (disc diameter: 6 mm)	Leaf hot water extract (10 g/L): activity against EC (IZD = 8.5 ± 0.4 mm), SA (IZD = 10.8 ± 0.8 mm), and BS (IZD = 11.5 ± 0.4 mm).	Kenya	[116]
78.		<i>Dichrostachys cinerea</i> (L.)	Microdilution method	Twigs dichloromethane:methanol extract: activity against SE (MIC = 0.190 µg/mL) , EC (MIC = 750 µg/mL), BBA, BBL, PBA (MIC = 1000 µg/mL each), SA GMR, SA MR (MIC = 2000 µg/mL each); water extract: activity against PBA (MIC = 4000 µg/mL), no activity against BBA, BBL, SA GMR, SA MR, SA, EC, and PA (MIC > 8000 µg/mL each).	South Africa	[129]
			Micro-titre plate dilution assay	Leaf dichloromethane:methanol extract: activity against SM (MIC = 1.33 mg/mL), SS (MIC = 4 mg/mL), LA (MIC = 6.67 mg/mL), LC (MIC = 5.33 mg/mL), PG (MIC = 2.67 mg/mL), FN (MIC = 2 mg/mL); water extract:	South Africa	[143]

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				activity against SM and PG (MIC = 2 mg/mL each), SS (MIC = 4 mg/mL), LA and LC (MIC = 8 mg/mL each), no activity against FN. Stem dichloromethane:methanol extract: activity against SM and PG (MIC = 2 mg/mL each), SS (MIC = 3.33 mg/mL), LC (MIC = 4 mg/mL), and FN (MIC = 0.67 mg/mL), no activity against LA; water extract: activity against PG (MIC = 2 mg/mL), and FN (MIC = 8 mg/mL), no activity against SM, SS, LA, and LC.		
			Microplate Alamar Blue Assay (MABA)	Fruit methanol extract: no activity against MTB H37Ra and MTB H37Rv (MIC > 2048 µg/mL).	Cameroon	[212]
			BACTEC MGIT™ 960 system and disc diffusion method (15 mg extract/disc)	Root methanol extract: considerable activity against MTB H37Rv no activity against EC, SA, and CA (IZD = 6 ± 0 mm, MIC not applicable).	Kenya	[111]
			Microplate serial dilution method	Root ethanol extract: activity against MA (MIC = 0.156 mg/mL), no activity against BS, BC, EC, SA, and PA.	Botswana	[110]
			Cup-plate agar diffusion (3 mg extract/cup)	Stem bark water extract: activity against BC (IZD = 9.5 mm), CBD (IZD = 10.0 mm), KP (IZD = 9.0 mm), PM (IZD = 10.5 mm), PA (IZD = 12.0 mm), ST (IZD = 12.0 mm), and SP (IZD = 9.5 mm); methanol extract: activity against BC and KP (IZD = 10.5 mm each), CBD (IZD = 11.0 mm), PM, PA, and ST (IZD = 10.0 mm each), and SP (IZD = 11.5 mm); ethyl acetate extract: activity against BC and PA (IZD = 8 mm each), KP (IZD = 9.5 mm), PM (IZD = 7.0 mm), and SP (IZD = 10.0 mm); no activity against CBD and ST.	Cameroon	[213]

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			Well-diffusion assay (well diameter: 4 mm)	Leaf methanol extract (10 mg/mL): activity against SA (IZD = 2.13 ± 0.25 mm), <i>Streptococcus</i> group A (IZD = 2.50 ± 0.58 mm), PA (IZD = 4.75 ± 0.65 mm), no activity against EC. Root methanol extract: activity against PA (IZD = 4.00 ± 0.82 mm), no activity against SA, <i>Streptococcus</i> group A and EC.	Zimbabwe	[128]
			Bacteria assay on agar plates	Fruit methanol extract: activity against BC, BP, BS, MCK, and SA (MIC = 1 mg/mL each), EBC, EC, and SRM (MIC = 5 mg/mL each), no activity against EA and PV; acetone extract: activity against BC and EBC (MIC = 5 mg/mL), BP, BS, MCK, SA, and EC (MIC = 1 mg/mL each), no activity against EA, PV, and SRM; water extract: no activity against BC, BP, BS, MCK, SA, EBC, EA, EC, PV, and SRM.	Zimbabwe	[202]
79.		<i>Dichrostachys glomerata</i> (Forssk.) Chiov. (syn. <i>Dichrostachys cinerea</i> (L.))	Well diffusion antimicrobial activity (100 µg extract/well)	Seed dichloromethane/methanol (1:1) extract: activity against STM (IZD = 13 mm), LM (IZD = 16 mm), EC (IZD = 14 mm), and SA (IZD = 18 mm).	Cameroon	[214]
			Liquid micro-broth dilution	Fruit methanol extract: activity against various strains of EC (MIC = 256-1024 µg/mL), various strains of EA (MIC = 128-1024 µg/mL), various strains of EBC (MIC = 1024 µg/mL for each strain), various strains of KP (MIC = 512-1024 µg/mL), various strains of PS (MIC = 256-1024 µg/mL), and various strains of PA (MIC = 512-1024 µg/mL).	Cameroon	[215]
80		<i>Dichrostachys cinerea</i> (L.) Wight et Arn. subsp. <i>africana</i> Brenan & Brummitt	Plate-hole diffusion method	Bark methanol and water extracts: no activity against SE and SA.	South Africa	[148]

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81.		<i>Entada abyssinica</i> A. Rich	Microdilution method	Stem bark ethanol extract: activity against ST (MIC = 12.5 mg/mL), EC (MIC = 12.5 mg/mL), VC (MIC = 0.8 mg/mL), no activity against KP.	Tanzania	[108]
			Well diffusion antimicrobial activity (5 µg extract/well)	Leaf/stem methanol extract: activity against SA (IZD = 1.5 cm for ATC29213 and 1.0 cm for NCRL), SE and SF (IZD = 1.0 cm each), and BS (IZD = 2.0 cm)	Uganda	[183]
			Microbroth dilution	Bark chloroform fraction: poor activity against EC (MIC = 500 µg/mL), PA (MIC = 1000 µg/mL), SA (MIC = 500 µg/mL), and SF (MIC = 500 µg/mL); petroleum ether fraction: activity against EC (MIC = 250 µg/mL), PA (MIC = 62 µg/mL), SA (MIC = 125 µg/mL), and SF (MIC = 62 µg/mL).	Uganda	[183]
			Agar diffusion test (250 µg extract/test)	Stem bark acetone extract: activity against EC, <i>Proteus</i> sp., and SA (IZD = 8 mm each).	Cameroon	[216]
			Serial dilution assay	Stem bark methanol extract: activity against SA (MIC = 0.25-1 mg/mL), <i>Enterococci</i> (MIC = 0.06-2 mg/mL), PA (MIC = 0.13-0.5 mg/mL), <i>Klebsiella</i> (MIC = 1-8 mg/mL), and <i>Salmonella</i> (MIC = 0.5-2 mg/mL), no activity against MBC, MBA, MI, MT, and MTB at extract conc. of 0.5-2 mg/mL.	Kenya	[217]
			Two fold microdilution method	Stem bark ethanol extract: activity against MMA and MIP (MIC = 2.5 mg/mL each).	Tanzania	[169]
82.		<i>Entada leptostachya</i> Harms	Broth dilution method	Tuber methanol (70%) extract (10 g/L): activity against BC (MIC = 125 mg/mL), PA (MIC = 250 mg/mL each), no activity against ML and EC.	Kenya	[164]

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			Disc diffusion method (disc diameter: 6 mm)	Root hot water extract (10 g/L): activity against EC (IZD = 10.2 ± 0.2 mm), SA (IZD = 11.5 ± 0.4 mm), and BS (IZD = 8.8 ± 0.2 mm).	Kenya	[116]
83.		<i>Erythrina abyssinica</i> DC.	Liquid dilution method	Stem bark methanol extract: activity against BC (MIC = 0.125 mg/mL), and SA (MIC = 0.25 mg/mL).	Tanzania	[109]
			Microtitre plate method	Root bark total crude methanol extract: activity against MTB H37RV and MBA (MIC = 0.39 ± 0.0 mg/mL each), MTB TMC 331 (MIC = 2.35 ± 1.11 mg/mL); serial methanol extract: activity against MTB H37RV (MIC = 4.69 ± 2.20 mg/mL), MTB TMC 331 (MIC = 1.17 ± 0.55 mg/mL), and MBA (MIC = 1.0 ± 0.0 mg/mL); chloroform extract: activity against MTB H37RV (MIC = 0.89 ± 0.83 mg/mL), MTB TMC 331 (MIC = 0.39 ± 0.0 mg/mL), and MBA (MIC = 0.3 ± 0.13 mg/mL).	Uganda	[218]
			Agar diffusion method (impregnation with 300 mg extract/mL), BACTEC MGIT™ 960 system	Plant methanol extract: activity against MK, MTB, MF, and MS (complete inhibition at a conc. of 2 mg/mL), ST and KP (IZD = 8.00 mm each), SA (IZD = 8.66 mm), EC (IZD = 7.33 mm), and PA (IZD = 10.33 mm).	Kenya	[196]
			Well diffusion antimicrobial activity (5 µg extract/well)	Leaf/stem methanol extract: activity against SF (IZD = 3.0 cm), medium activity against SA (ATC29213 and NCRL), SE, and BS; poor activity against EC. Stem bark methanol extract (1 mg/mL): activity against SA (IZD = 1.0 cm for ATC29213 and 1.0 cm for NCRL), SE (IZD = 1.5 cm), SF (IZD = 3.0 cm), BS (IZD = 1.0 cm)	Uganda	[183]

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			Microbroth dilution	Leaf chloroform fraction: activity against EC (MIC = 125 µg/mL), SA (MIC = 62 µg/mL), and SF (MIC = 62 µg/mL); poor activity against PA (MIC = 500 µg/mL); petroleum ether fraction: activity against EC and PA (MIC = 250 µg/mL each), and SF (MIC = 62 µg/mL); poor activity against SA (MIC = 500 µg/mL). Bark chloroform fraction: activity against PA (MIC = 125 µg/mL), SA (MIC = 250 µg/mL), and SF (MIC = 62 µg/mL); poor activity against EC (MIC = 500 µg/mL); petroleum ether fraction: activity against PA (MIC = 250 µg/mL), SA (MIC = 125 µg/mL), and SF (MIC = 62 µg/mL); poor activity against EC (MIC = 500 µg/mL).	Uganda	[183]
			Agar dilution streak method	Leaf methanol extract: no activity against BS, MS, PA, SG and SA at concentrations of 1000 µg/mL	Rwanda	[96]
			Broth dilution method	Root/bark methanol (70%) extract: no activity against ML, BC, PA, and EC.	Kenya	[164]
84.		<i>Peltophorum africanum</i> Sond. (see also Mongalo, 2013 for more information)	Resazurin microplate assay (REMA)	Bark acetone extract: no activity against MTB (H37Ra) (MIC > 100 ± 2.6 µg/mL) and MTB 2 (MIC > 100 ± 10.2 µg/mL).	South Africa	[26]
			Broth microdilution method	Root methanol extract: activity against SE (MIC = 0.50 mg/mL), and SA (MIC = 2 mg/mL); water extracts: activity against SE and SA (MIC = 3.61 mg/mL each).	South Africa	[148]
85.		<i>Tamarindus indica</i> L.	Tetrazolium microplate assay	Fruit methanol (80%) extract: no activity against MTB (H37Rv) (MIC > 1.6 mg/mL)	Malaysia	[165]
			Agar diffusion technique	Flowers dichloromethane extract: activity against SA (MIC = 125 mg/mL), and BC (MIC = 500 µg/mL), no activity against MCF, EC, and PA; methanol extract: activity against SA (MIC = 25 µg/mL), BC, EC, and PA (MIC = 125	Yemen	[36]

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				µg/mL each), no activity against MCF; water extract: activity against SA, BC, MCF, EC, and PA (MIC = 125 µg/mL each).		
			Broth microdilution assay	Fruit acetone extract: activity against MS (MIC = 0.31 mg/mL), MF (MIC = 0.15 mg/mL each), and MA (MIC = 0.078 mg/mL).	Cameroon	[219]
			Broth microdilution assay	Fruit methanol extract: activity against two MDR EC strains MC4100 (MIC = 1024 µg/mL) and W3110 (MIC = 512 µg/mL), MDR EA strain EA298 (MIC = 1024 µg/mL), two MDR EBC strains ECC169 and BM67 (MIC = 1024 µg/mL each), MDR KP strain K2 (MIC = 1024 µg/mL), no activity against six MDR EC strains, five MDR EA strains, MDR EC strain BM47, four MDR KP strains, three MDR PC strains, and two MDR PA strains.	Cameroon	[220]
			Agar dilution method	Leaf ethanol (95%) extract: activity against five EC strains (MIC = 15.62 mg/mL)	Thailand	[221]
86.		<i>Tephrosia purpurea</i> subsp. <i>leptostachya</i> (DC.) Brummit	Disc diffusion method (1 seed per test)	Seed: activity against BS and PC (IZD = 1 mm each), and STM (IZD < 1 mm), no activity against EC.	India	[174]
87.	Loganiaceae	<i>Strychnos spinosa</i> Lam.	Microdilution method	Fruit dichloromethane:methanol extract: activity against BBA (MIC = 40 µg/mL), SE (MIC = 250 µg/mL), PA (MIC = 500 µg/mL), EC (MIC = 1000 µg/mL), BBL (MIC = 1500 µg/mL), SA MR, and PBA (MIC = 2000 mg/mL each), SA GMR and SA (MIC = 4000 µg/mL each). Fruit water extract: activity against SA GMR (MIC = 1000 µg/mL), SA MR and SA (MIC = 8000 µg/mL each); no activity against BBA, BBL, SE, PBA, EC, and PA.	South Africa	[129]

SNo.	FAMILY	PLANT NAME	METHOD OF ANTI-MICROBIAL ACTIVITY TEST EMPLOYED	ANTIMICROBIAL ACTIVITY OF EXTRACT	COUNTRY	BOOK OR JOURNAL REFERENCE
			Broth microdilution assay	Mature edible fruit methanol (70%) extract: activity against STM (MIC = 25 mg/mL), BC (MIC = 1.6 mg/mL), and KP (MIC = 12.5 mg/mL), no activity against SP and PI.	South Africa	[222]
			Broth serial microdilution method with tetrazolium violet	Leaf acetone extract; activity against SA, EF (MIC = 0.16 mg/mL each), BC ((MIC = 0.32 mg/mL), and EC (MIC = 0.32-1.25 mg/mL); methanol extract: activity against EC (MIC = 0.63 mg/mL), no activity against SA, BC, and EF; dichloromethane/methanol extract: activity against SA, EF, and EC (MIC = 0.63 mg/mL each), no activity against BC; alkaloid extract: activity against SA (MIC = 0.16 mg/mL), BC (MIC ≥ 1.25 mg/mL), EF (MIC = 0.32 mg/mL), and EC (MIC = 0.16-1.25 mg/mL). Leaf <i>n</i> -hexane fraction: activity against SA (MIC = 0.08 mg/mL), BC (MIC = 0.63-1.25 mg/mL), EF (MIC = 0.32 mg/mL), and EC (MIC = 0.08-1.25 mg/mL); chloroform fraction: activity against SA (MIC = 0.08 mg/mL), BC (MIC = 0.63 mg/mL), EF (MIC = 0.16 mg/mL), and EC (MIC = 0.16-0.32 mg/mL); ethyl acetate fraction: activity against SA (MIC = 0.16 mg/mL), BC (MIC = 0.63-1.25 mg/mL), EF (MIC = 0.16-0.32 mg/mL), and EC (MIC = 0.16-1.25 mg/mL); <i>n</i> -butanol fraction: activity against SA (MIC = 0.08-0.16 mg/mL), BC (MIC = 0.63 mg/mL), EF (MIC = 1.25 mg/mL), and EC (MIC = 0.63 mg/mL); water fraction: no activity against SA, BC, EF, and EC.	Nigeria	[223]
88.	Malvaceae	<i>Adansonia digitata</i> L.	Broth microdilution assay	Mature edible fruit methanol (70%) extract: activity against STM (MIC = 6.3 mg/mL), SP (MIC = 6.3 mg/mL), BC (MIC = 1.6 mg/mL), and KP (MIC = 12.5 mg/mL), no activity against PI.	South Africa	[222]
			Broth microdilution assay	Leaf water extract: activity against SA, EC, KO, and SAE (MIC = 1.56 mg/mL each), and SHS (MIC = 6.25 mg/mL); methanol (100%) extract: activity against SA (MIC = 0.78 mg/mL), EC, SAE, and SHS (MIC = 1.56 mg/mL each), and KO (MIC = 0.39 mg/mL).	South Africa	[224]

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					<p>Seed water and methanol (100%) extracts: no activity against SA, EC, KO, SAE, and SHS (MIC > 12.5 mg/mL).</p> <p>Pulp water and methanol (100%) extracts: no activity against SA, EC, KO, SAE, and SHS (MIC > 12.5 mg/mL).</p>		
			Broth microdilution assay		<p>Fruit acetone extract: activity against MS and MF (MIC = 1.25 mg/mL each), and MA (MIC = 0.31 mg/mL).</p> <p>Leaf acetone extract: activity against MS, MF, and MA (MIC = 1.25 mg/mL each).</p>	Cameroon	[219]
			Broth microdilution assay		<p>Leaf methanol extract: activity against seven MDR EC strains (MIC = 256-1024 µg/mL), five MDR EA strains (MIC = 128 – 1024 µg/mL), three MDR EBC strains (MIC = 512 – 1024 µg/mL), five strains MDR KP (MIC = 128-1024 µg/mL), two MDR strains PS (MIC = 1024 µg/mL each), no activity against EC ATCC10536, EA EA27, PC ATCC 29914, and PA PA01 and PA124.</p>	Cameroon	[220]
			Rapid colorimetric assay	INT	<p>Fruit methanol extract: activity against MDR EC strain ATCC10536 (MIC = 512 µg/mL), MDR EA strain EA298 (MIC = 256 µg/mL), MDR KP strain K2 (MIC = 1024 µg/mL), MDR PS Strain PS29645 (MIC = 256 µg/mL), no activity against seven MDR EC strains, five MDR EA strains, four MDR KP strains, two MDR PS strains, and three EBC strains.</p>	Cameroon	[220]
			Serial microplate bioassay	dilution	<p>Stem bark dichloromethane extract: activity against SA MR (MIC = 0.156 mg/mL), SA ATCC6538, PA, and SE (MIC > 2.5 mg/mL each), no activity against EF; methanol extract: activity against SA ATCC6538, EF, and SE (MIC = 1.25 mg/mL each), and SA MR (MIC = 0.078 mg/mL), no activity against PA; water/ethanol extract: active against Sa ATCC6538 (MIC = 2.5 mg/mL), EF (MIC = 0.625 mg/mL), SA MR (MIC = 0.078 mg/mL), no active against PA.</p>	Bénin	[225]

SNo.	FAMILY	PLANT NAME	METHOD OF ANTI-MICROBIAL ACTIVITY TEST EMPLOYED	ANTIMICROBIAL ACTIVITY OF EXTRACT	COUNTRY	BOOK OR JOURNAL REFERENCE
			Microdilution assay	Bark petroleum ether extract: activity against BS and EC (MIC = 3.125 mg/mL each), KP (MIC = 6.25 mg/mL), and Sa (MIC = 12.5 mg/mL); dichloromethane extract: activity against BS, KP, and SA (MIC = 3.125 mg/mL each), and EC (MIC = 1.56 mg/mL); ethanol extract: activity against BS (MIC = 0.78 mg/mL), EC and KP (MIC = 3.125 mg/mL each), and SA (MIC = 1.56 mg/mL); water extract: activity against EC, KP, and SA (MIC = 3.125 mg/mL), no activity against BS (MIC < 12.5 mg/mL).	South Africa	[226]
			Agar well diffusion method (hole diameter: 10 mm)	Root ethanol extract (50 mg/mL): activity against SA (IZD = 25 mm), no activity against EC.	Somalia	[104]
89.		<i>Grewia bicolor</i> Juss.	Antimicrobial sensitivity test	Root ethanol extract: sensitive against SA, EC, SP, SAE, and KP. Stem bark ethanol extract: sensitive against SA, EC, and KP, non-sensitive against SP and SAE. Leaf ethanol extract: sensitive against EC, SAE, and KP, non-sensitive against SA and SP.	Nigeria	[199]
90.		<i>Hibiscus micranthus</i> L.f.	Agar hole-plate diffusion method (5 mg extract/hole), agar dilution method	Bark methanol extract: activity against AV (IZD = 6.6 mm, MIC = 5 mg/mL), no activity against SM. Wood methanol extract: activity against SM (IZD = 1.75 mm), no activity against AV.	Tanzania	[227]
			Agar-well diffusion method (hole diameter: 6 mm), macrotube	Leaf methanol (80%) extract (800 µg/mL): activity against SA (IZD = 22.67 ± 1.202 mm, MIC = 2.5 mg/mL), SPN (IZD = 13.00 ± 1.528 mm, MIC = 0.625 mg/mL), KP (IZD = 16.33 ± 1.202 mm, MIC = 2.5 mg/mL), no activity against SP, PA, EC, and PM.	Ethiopia	[228]

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			serial dilution method			
91.		<i>Hibiscus surattensis</i> L.	Microdilution method	Leaf dichloromethane:methanol extract: activity against BBA (MIC = 750 µg/mL), SE, PBA, EC, and PA (MIC = 1000 µg/mL each), SA and SA GMR (MIC = 2000 µg/mL each), SA MR (MIC = 4000 µg/mL), and BBL (MIC = 8000 µg/mL). Leaf aqueous extract: activity against SA GMR (MIC = 2000 µg/mL), SA MR (MIC = 4000 µg/mL), and PBA (MIC = 8000 µg/mL); no activity against BBA, BBL, SA, SE, EC, PA (MIC > 8000 µg/mL each).	South Africa	[129]
92.		<i>Pavonia urens</i> Cav.	Broth microdilution method	Leaf ethanol extract: no activity against EF, SA, EC, and PA.	Ethiopia	[124]
93.		<i>Sida rhombifolia</i> L. var. <i>rhombifolia</i> (syn. <i>Sida rhombifolia</i> L.)	Microplate alamar blue assay (MABA)	Stem and leaf ethanol extract: activity against PBA (MIC > 500 mg/mL), no activity against MTB (H37Rv) (MIC > 1 mg/mL) and MS (MIC = 1 mg/mL).	South Africa	[160]
		<i>Sida rhombifolia</i> L.	Broth microdilution method	Root ethanol extract: no activity against EF, SA, EC, and PA.	Ethiopia	[124]
			Disc diffusion method C	Root petroleum ether extract: activity against EC (IZD = 16 ± 1 mm), SA (IZD = 16 ± 2 mm), PA (IZD = 10 ± 0 mm), and STM (IZD = 16.5 ± 0.5 mm); chloroform extract: activity against EC (IZD = 17 ± 0 mm), SA (IZD = 18 ± 1 mm), PA (IZD = 13.8 ± 0 mm), and STM (IZD = 14.5 ± 1.5 mm); methanol extract: activity against EC (IZD = 20 ± 0 mm) , SA (IZD = 15 ± 2 mm), PA (IZD = 16 ± 0 mm), and STM (IZD = 17.5 ± 2 mm).	Ethiopia	[229]

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			Agar diffusion method	Root ethanol (80%) extract: activity against EC (MIC = 25 mg/mL), BS (MIC = 1.56 mg/mL), and SA (MIC = 6.25 mg/mL), no activity against PA.	India	[103]
94.		<i>Sida serratifolia</i> R. Wilczek & Steyaert	Disc diffusion method (0.5 mg extract / disc)	Leaf extract: ether and chloroform fractions active against SA and EC (IZD = 15-20 mm for each combination) ; petrol fraction not active against SA and EC.	Tanzania	[118]
95.		<i>Waltheria indica</i> L.	Liquid dilution method	Shoot <i>n</i> -hexane extract: activity against BC (MIC = 0.5 mg/mL), weak activity against SA (MIC = 1 mg/mL).	Tanzania	[109]
			Microdilution method	Root dichloromethane:methanol extract: activity against PA (MIC = 250 µL/mL), BBA (MIC = 310 µL/mL), BBL (MIC = 500 µL/mL), SE and EC (MIC = 1000 µL/mL each), SA (MIC = 2000 µL/mL), SA MR (MIC = 3000 mg/mL), and SA GMR (MIC = 4000 µL/mL); water extract: activity against SA MR (MIC = 2000 µL/mL); no activity against BBA, BBL, SA GMR, SA, SE, PBA, EC, PA (MIC > 8000 µL/mL each).	South Africa	[129]
			Microplate serial dilution method (500 µg extract / disc)	Leaf ethanol extract: no activity against BS, BC, EC, SA, and PA.	Botswana	[204]
			Antimicrobial sensitivity test	Root ethanol extract: sensitive against SA, EC, SP, SAE, and KP. Stem bark ethanol extract: sensitive against SP, SAE EC, and KP, non-sensitive against SA. Leaf ethanol extract: sensitive against SA, EC, and KP, non-sensitive against SAE and SP.	Nigeria	[199]
96.	Meliaceae	<i>Trichilia emetica</i> Vahl	Micro-titer plate dilution technique	Leaf dichloromethane:methanol (1:1) extract: activity against SA, SA MR and SA GMR (MIC = 0.40 mg/mL each), SE (MIC = 0.20 mg/mL), and PA	southern Africa	[32]

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				(MIC = 0.03 mg/mL); water extract: no activity against SA, SA MR, SA GMR, SE, and PA (MIC > 16 mg/mL each).		
			Serial microplate dilution method	Leaf <i>n</i> -hexane extract: activity against SA and EC (MIC = 2.50 mg/mL each), PA (MIC = 1.25 mg/mL), and EF (MIC = 0.30 mg/mL); dichloromethane extract: activity against SA (MIC = 1.25 mg/mL), EC (MIC = 0.60 mg/mL), PA (MIC = 1.25 mg/mL), and EF (MIC = 0.08 mg/mL); acetone extract: activity against SA (MIC = 0.60 mg/mL), EC and PA (MIC = 0.40 mg/mL each) , and EF (MIC = 0.26 mg/mL).	South Africa	[134]
			Microplate broth dilution method	Seed <i>n</i> -hexane extract: activity against SA (MIC = 250 µg/mL), EF and MS (MIC = 125 µg/mL each), no activity against KP and PA; dichloromethane extract: activity against SA (MIC = 250 µg/mL), EF and MS (MIC = 125 µg/mL each), and PA (MIC = 31 µg/mL) , no activity against KP; ethylacetate extract: activity against SA (MIC = 250 µg/mL), EF and PA (MIC = 125 µg/mL each), no activity against KP and MS; methanol extract: activity against PA and MS (MIC = 125 µg/mL each), no activity against SA, EF, and KP.	Mozambique	[31]
			Agar dilution method	Fruit methanol extract (2000 µg/mL): activity against BC, NG, SA, and ST, no activity against SP, SPN, SHF, STM, SD, and EC.	Ethiopia	[139]
		<i>Trichilia emetica</i> Vahl <i>subsp. emetica</i>	MIC assay	Leaf dichloromethane:methanol extract: activity against KP (MIC = 1.67 mg/mL), MC (MIC = 1.40 mg/mL), MS (MIC = 2.67 mg/mL each), and SA (MIC = 0.83 mg/mL); water extract: activity against KP, MC, MS, and SA (MIC = 8.00 mg/mL each).	South Africa	[230]
97.	Menispermaceae	<i>Cissampelos pareira</i> L.	Agar diffusion method	Leaf and stem ethanol (80%) extract: activity against EC, PA, and SA (MIC = 25 mg/mL each), and BS (MIC = 12.5 mg/mL).	India	[103]

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			BACTEC MGIT™ 960 system and disc diffusion method (15 mg extract/disc)	Root methanol extract: considerable activity against MTB H37Rv, activity against EC (IZD = 15.3 ± 0.3 mm, MIC = 234 µg), SA (IZD = 11.0 ± 1.0 mm, MIC = 117 µg), and CA (IZD = 11.7 ± 0.3 mm, MIC = 468 µg).	Kenya	[111]
			Disc diffusion test (5 mg extract / disc)	Root methanol extract: activity against SA (IZD = 20 ± 0.6 mm), STM (IZD = 17 ± 0.7 mm), KP (IZD = 14 ± 0.6 mm), and EC (IZD = 9 ± 0.6 mm), no activity against PV and SPN.	Kenya	[231]
98.	Moraceae	<i>Milicia excelsa</i> (Welw.) C.C. Berg	Agar diffusion method (0.3125 - 10 mg extract / well)	Leaf methanol extract: activity against diverse isolates of SA (IZD = 11-16 mm at 10 mg extract/well, no activity at conc. below 1.25 mg extract/well).	Nigeria	[232]
99.	Moringaceae	<i>Moringa oleifera</i> Lam.	Agar well diffusion method	Leaf methanol (95%) extract: activity against BC (IZD = 10.7 ± 0.6 mm), and KP (IZD = 9.7 ± 0.6 mm), no activity against SA, SE, EC, and PA.	India	[167]
			Two folds broth microdilution method	Leaf petroleum ether extract: activity against MIP and MMA (MIC = 3.13 mg/mL each); ethyl acetate: activity against MIP (MIC = 1.51 mg/mL) and MM (MIC = 0.37 mg/mL); methanol extract: activity against MIP (MIC = 1.51 mg/mL) and MM (MIC = 3.13 mg/mL). Stem bark petroleum ether extract: activity against MIP and MMA (MIC = 3.13 mg/mL each); ethyl acetate: activity against MIP (MIC = 3.13 mg/mL) and MM (MIC = 1.51 mg/mL); methanol extract: activity against MIP and MM (MIC = 3.13 mg/mL each). Root bark petroleum ether extract: activity against MIP (3.13 mg/mL) and MMA (MIC = 6.25 mg/mL); ethyl acetate: activity against MIP (MIC = 1.51 mg/mL) and MM (MIC = 6.25 mg/mL); methanol extract: activity against MIP (MIC = 3.13 mg/mL) and MM (MIC = 6.25 mg/mL).	Tanzania	[233]

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				Seed petroleum ether extract: activity against MIP (MIC = 1.51 mg/mL) and MMA (MIC = 3.13 mg/mL); ethyl acetate: activity against MIP and MMA (MIC = 0.37 mg/mL each); methanol extract: activity against MIP and MM (MIC = 1.51 mg/mL each).		
			Agar diffusion method	Stem bark ethanol (80%) extract: activity against PA (MIC = 25 mg/mL), BS and SA (MIC = 12.5 mg/mL), no activity against EC.	India	[103]
			Agar-well diffusion method (20 mg extract / well)	Leaf water extract: activity against SA (IZD = 7.3±0.3 mm), SE (IZD = 12.3±0.6 mm), BC (IZD = 7.7±0.4 mm), and PA (IZD = 9.6±0.3 mm), no activity against KP, EC, SAE, and PV; butanol extract: activity against SA (IZD = 10.3±0.3 mm), SE (IZD = 14.0±0.0 mm), BC (IZD = 9.0±0.6 mm), KP (IZD = 6.3±0.3 mm) and PA (IZD = 11.6±0.3 mm), no activity against EC, SAE, and PV; ethyl acetate extract: activity against SA (IZD = 13.6±0.3 mm), SE (IZD = 16.0±0.5 mm), BC (IZD = 10.2±0.7 mm), KP (IZD = 6.6±0.3 mm), EC (IZD = 7.0±0.0 mm); SAE (IZD = 6.6±0.3 mm), PV (IZD = 6.3±0.3 mm), and PA (IZD = 13.3±0.3 mm); chloroform extract: activity against SA (IZD = 11.0±0.5 mm), SE (IZD = 9.0±0.5 mm), and BC (IZD = 7.4±0.3 mm), no activity against KP, EC, SAE, PV, and PA.	Sudan	[234]
			Agar well diffusion method (10 mg extract / well), two-fold serial broth method	Comprehensive testing of various extracts (<i>n</i> -hexane, ethyl acetate, methanol, and distilled water) of many parts of the plant (leaf, stem, flower, fruit in four various stages of ripening, seed) against gram positive (BC, BS, SA, SE, ML, and EF) and gram negative (EC, ST, SPT, PA, KP, and SRM) bacterial strains. Ethyl acetate extract showed maximum activity against all tested bacterial strains, followed by methanol, <i>n</i> -hexane and distilled water extracts in descending order. Highest antimicrobial activities per extraction agent: Leaf fresh <i>n</i> -hexane extract: activity against EC (IZD = 11 mm, MIC = 8 mg/mL); mature fruit	India	[235]

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				fresh ethyl acetate extract: activity against SRM (IZD = 22 mm, MIC = 2 mg/mL) ; mature fruit hot distilled water extract: activity against SA (IZD = 27 mm, MIC = 0.125 mg/mL) ; stem hot methanol extract: activity against SA (IZD = 22 mm) .		
			Inhibition halo technique (10 µg extract / disc)	Essential oil from leaves: activity against BS (IZD = 10.7±1.2 mm), EC (IZD = 6.7 ± 0.6 mm), and PA (IZD = 8.0 ± 1.3 mm), no activity against SA.	Mozambique	[236]
			Agar diffusion technique (4 mg extract/disc), tube dilution technique	Seed chloroform extract: activity against EA, SA, and PA (IZD = 6 mm each, MIC > 4 mg/mL each), <i>Shigella</i> sp. (IZD = 6 mm, MIC = 2 mg/mL), EC (IZD = 9 mm, MIC > 4 mg/mL), STM (IZD = 10 mm, MIC = 1 mg/mL), and ST (IZD = 6 mm, MIC = 2 mg/mL); ethanol extract (400 mg/mL): activity against EA, <i>Shigella</i> sp., PA, and ST (IZD = 6 mm each, MIC > 4 mg/mL each), SA (IZD = 11 mm, MIC = 4 mg/mL), EC (IZD = 9 mm, MIC > 4 mg/mL), and STM (IZD = 11 mm, MIC > 4 mg/mL). Leaf chloroform extract (400 mg/mL): activity against EA, SA, <i>Shigella</i> sp., and PA (IZD = 6 mm each, MIC > 4 mg/mL each), EC (IZD = 8 mm, MIC = 2 mg/mL), STM (IZD = 10 mm, MIC = 1 mg/mL), and ST (IZD = 8 mm, MIC = 2 mg/mL); methanol extract (400 mg/mL): activity against EA (IZD = 7 mm, MIC = 2 mg/mL), SA (IZD = 9 mm, MIC = 2 mg/mL), <i>Shigella</i> sp. (IZD = 6 mm, MIC = 2 mg/mL), PA and EC (IZD = 8 mm each, MIC > 4 mg/mL each) STM and ST (IZD = 6 mm each, MIC > 4 mg/mL each).	Nigeria	[237]
100.	Myricaceae	<i>Myrica salicifolia</i> Hochst. ex A. Rich.	Agar dilution method	Stem bark methanol extract (2000µg/mL): activity against BC, NG, SA, and SD, no activity against SP, SPN ST, STM, SHF, and EC.	Ethiopia	[139]
101	Myrtaceae	<i>Eucalyptus globulus</i> Labill.	In vitro screening	Leaf methanol extract: no activity against MA (MIC >500 µg/mL) and MS (MIC > 500 µg/mL).	n.d	[101]

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			REMA assay	Leaf ethanol extract: activity against MS (MIC = 125 µg/mL) and MU (MIC = 250 µg/mL).	Cameroon	[112]
102		<i>Psidium guajava</i> L.	Tetrazolium microplate assay	Leaf methanol (80%) extract: no activity against MTB (H37Rv) (MIC > 1.6 mg/mL)	Malaysia	[165]
			MIC assay	Leaf dichloromethane:methanol extract: activity against KP and MC (MIC = 1.00 mg/mL each), MS (MIC = 2.00 mg/mL), and SA (MIC = 0.50 mg/mL); water extract: activity against KP and MC (MIC = 0.67 mg/mL each), MS (MIC = 4 mg/mL), and SA (MIC = 0.50 mg/mL).	South Africa	[230]
			Paper disc diffusion method	Leaf methanolic extract: activity against EC and BS (MIC = 0.78 µg/ml each) , and SA (MIC = 25 µg/mL) .	India	[37]
			Disc diffusion method (3 mg extract / disc) + microdilution method	Leaf acetone extract: activity against SE MR (IZD = 15 mm, MIC = 0.039 mg/mL), SA MR (IZD = 12 mm, MIC = 0.039 mg/mL), EC (IZD = 6 mm, MIC = 0.312 mg/mL), and EBC (IZD = 4 mm, MIC = 0.312 mg/mL); <i>n</i> -hexane extract: no activity against SE MR (IZD = 10 mm), SA MR (IZD = 12 mm), EC, and EBC; methanol extract: activity against SE MR (IZD = 20 mm, MIC = 0.078 mg/mL) , SA MR (IZD = 22 mm, MIC = 0.078 mg/mL) , EC (IZD = 10 mm, MIC = 0.312 mg/mL), and EBC (IZD = 13 mm, MIC = 0.625 mg/mL); water extract: no activity against SE MR (IZD = 3 mm), SA MR (IZD = 6 mm), EC, and EBC.	South Africa	[155]
103.		<i>Syzygium cordatum</i> Hochst. ex Krauss	Microdilution method	Bark dichloromethane:methanol extract: activity against SA GMR (MIC = 60 µL/mL), BBA, PA (MIC = 250 µL/mL), PA (MIC = 310 µL/mL), EC (MIC = 750 µL/mL), SE (MIC = 1000 µL/mL), SA GMR, SA MR and SA (MIC = 2000 µL/mL each); water extract: activity against BBA and EC (MIC = 1000 µL/mL each), SA GMR, SA MR and SA (MIC = 2000 µL/mL each), SE and	South Africa	[129]

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				PA (MIC = 4000 µL/mL each), PBA (MIC = 8000 µL/mL); no activity against BBL (MIC > 8000 µL/mL).		
			MIC assay	Mature bark dichloromethane:methanol extract: activity against KP (MIC = 1.00 mg/mL), MC (MIC = 0.83 mg/mL), MS (MIC = 1.33 mg/mL), and SA (MIC = 0.38 mg/mL); water extract: activity against KP and MC (MIC = 0.50 mg/mL each), MS (MIC = 2.00 mg/mL), and SA (MIC = 0.25 mg/mL).	South Africa	[230]
			Disc diffusion assay (200 µg extract / disc) + Broth microdilution assay	Bark water extract: activity against HI (IZD = 22.51 ± 0.92 mm, MIC = 1 mg/mL) and SA (IZD = 21.16 ± 0.16 mm, MIC = 0.5 mg/mL), no activity against MS and SP; methanol extract: activity against SA (IZD = 22.22 ± 0.38 mm, MIC = 0.5 mg/mL), no activity against HI, MS, and SP.	South Africa	[238]
			Microdilution assay	Leaf petroleum ether extract: activity against BS (MIC = 3.13 µg/mL), EC (MIC = 1.56 µg/mL), KP and SA (MIC = 6.25 µg/mL each); dichloromethane extract: activity against EC (MIC = 0.10 µg/mL), BS (MIC = 0.195 µg/mL), KP (MIC = 0.39 µg/mL), and SA (MIC = 0.20 µg/mL); ethanol extract: activity against SA (MIC = 0.01 µg/mL), BS (MIC = 0.20 µg/mL), EC and KP (MIC = 1.56 µg/mL each); water extract: activity against BS and SA (MIC = 0.78 µg/mL each), EC and KP (MIC = 0.39 µg/mL each).	South Africa	[24]
			Broth microdilution method	Bark methanol extract: activity against SE and SA (MIC = 3.75 mg/mL each); water extracts: activity against SE and SA (MIC = 2.50 mg/mL each).	South Africa	[148]

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104.	Phyllanthaceae	<i>Antidesma membranaceum</i> Müll. Arg.	Two fold microdilution method	Stem bark ethanol extract: activity against MMA (MIC = 1.25 mg/mL), and MIP (MIC = 0.3125 mg/mL).	Tanzania	[169]
			Two fold microdilution method	Root ethanol extract: activity against MMA (MIC = 0.62 mg/mL) and MIP (MIC = 1.25 mg/mL).	Tanzania	[78]
105.		<i>Antidesma venosum</i> Mey. ex.Tul.	E. Microplate alamar blue assay (MABA)	Root bark ethanol extract: activity against PBA (MIC = 0.25 mg/mL), no activity against MS (MIC > 1 mg/mL). Leaf ethanol extract: no activity against MS (MIC > 1 mg/mL) and PBA (MIC > 0.5 mg/mL).	South Africa	[160]
			In vitro broth microdilution screening assay	Leaf <i>n</i> -hexane extract: activity against MS (MIC = 1.25 mg/mL); dichloromethane extract: activity against MS (MIC = 1.25 mg/mL); acetone extract: activity against MS (MIC = 0.260 mg/mL); methanol extract: activity against MS (MIC = 0.90 mg/mL).	South Africa	[126]
106.		<i>Bridelia micrantha</i> (Hochst.) Baill.	Micro-titer plate dilution technique	Bark dichloromethane:methanol (1:1) extract: activity against SA (MIC = 2 mg/mL), SA MR (MIC = 2 mg/mL), SA GMR (MIC = 2 mg/mL), SE (MIC = 2 mg/mL), and PA (MIC = 2 mg/mL); water extract: activity against SA (MIC = 8 mg/mL), SA MR (MIC = 6 mg/mL), SA GMR (MIC = 4 mg/mL), SE (MIC = 8 mg/mL), no activity against PA ((MIC > 16 mg/mL). Leaf dichloromethane:methanol (1:1) extract: activity against SA (MIC = 2 mg/mL), SA MR (MIC = 1 mg/mL), SA GMR (MIC = 1 mg/mL), SE (MIC = 2 mg/mL), and PA (MIC = 2 mg/mL); water extract: activity against SA (MIC = 8 mg/mL), SA MR (MIC = 4 mg/mL), SA GMR (MIC = 16 mg/mL), SE (MIC = 16 mg/mL), no activity against PA ((MIC > 16 mg/mL).	southern Africa	[32]
			Disc diffusion assay (6 mg)	Stem bark methanol extract: activity against EC 25922 (IZD = 15 mm, MIC = 1.25 mg/mL), EC 35922, EA 29751 and EA 13048 (IZD = 14 mm each, MIC	Cameroon	[186]

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			extract/disc), agar dilution assay	= 10 mg/mL each), EBC HGY18 (IZD = 16 mm, MIC = 2.5 mg/mL), KP HGY19 (IZD = 15 mm, MIC = 10 mg/mL), KP HGY6 and KO U103 (IZD = 16 mm each, MIC = 10 mg/mL each), SRM HGY4 and SMR HYG10 (IZD = 16 mm each, MIC = 5 mg/mL each), PA 27853 (IZD = 16 mm, MIC = 1.25 mg/mL), AB HGY13 (IZD = 15 mm, MIC = 1.25 mg/mL), AB HGY12 (IZD = 17 mm, MIC = 2.5 mg/mL), EH 9790 (IZD = 27 mm, MIC = 5 mg/mL) , <i>Enterococcus</i> sp. P054 (IZD = 15 mm, MIC = 1.25 mg/mL each), SA 25923 25922 (IZD = 16 mm, MIC = 1.25 mg/mL), SA U127 (IZD = 25 mm, MIC = 1.25 mg/mL) , and SSP (IZD = 17 mm, MIC = 2.5 mg/mL).		
			Resazurin microplate assay (REMA)	Bark acetone extract: activity against MTB (H37Ra) (MIC = 25 ± 0 µg/mL) and MTB 2 (MIC = 25 ± 1 µg/mL) .	South Africa	[28]
			Broth microdilution method	Bark methanol extract: activity against SE and SA (MIC = 4 mg/mL each); water extract: activity against SE (MIC = 1.25 mg/mL), and SA (MIC = 5 mg/mL).	South Africa	[148]
107.		<i>Flueggea virosa</i> (Roxb. ex Willd.) Royle	Broth microdilution method	Leaf acetone extract: activity against MS (MIC = 0.625 mg/mL), MF (MIC = 2.5 mg/mL), MA (MIC = 1.25 mg/mL) and MTB (TB8104) (MIC = 0.312 mg/mL)	South Africa	[145]
			Well diffusion antimicrobial activity (5 µg extract/well)	Leaf/stem methanol extract: activity against SA (IZD = 0.5 cm for ATC29213, and ZD = 1.0 cm for NCRL), and BS (IZD = 1.0 cm); medium activity against SE, poor activity against EC.	Uganda	[183]
		Securinega virosa (Roxb. ex Willd.) Baill. (syn.	Disc diffusion method (0.5 mg extract /disc)	Fruit pulp extract: ether fraction active against SA (IZD = 15-20 mm) ; ether and petrol fractions not active against SA.	Tanzania	[118]

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108.		Flueggea virosa (Roxb. ex Willd.) Royle <i>Phyllanthus amarus</i> Schumach. & Thonn. (see also Patel et al., 2011 for more information)	Disc-diffusion (1 mg extract / disc) and microdilution assays	Root petroleum ether extract: activity against KP (IZD = 0.14 ± 0.00 mm, MIC > 12.50 mg/mL), and SA (IZD = 0.32 ± 0.00 mm, MIC = 6.25 mg/mL), no activity against EC, ML, and BS; dichloromethane extract: activity against EC (bacteriostatic effect, MIC = 1.56 mg/mL), and SA (IZD = 0.57 ± 0.03 mm, MIC = 1.560 mg/mL), no activity against ML, KP, and BS; ethanol (80%) extract: activity against EC (IZD = 0.83 ± 0.02 mm, MIC = 0.78 mg/mL), ML (IZD = 0.61 ± 0.00 mm, MIC = 0.195 mg/mL), SA (IZD 0.05 ± 0.20 mm, MIC = 1.95 mg/mL), and BS (IZD < 0.10 mm, MIC = 0.78 mg/mL), no activity against KP. Leaf petroleum ether and dichloromethane extracts: no activity against EC, ML, KP, SA, and BS; ethanol (80%) extract: activity against EC (bacteriostatic effect, MIC = 0.195 mg/mL), KP (bacteriostatic effect, MIC = 0.780 mg/mL), SA (IZD = 0.21 ± 0.12 mm, MIC = 0.390 mg/mL), and BS (IZD < 0.10 mm, MIC = 1.56 mg/mL), no activity against ML.	Nigeria	[187]
			Disc diffusion method (10 mg extract / disc), microdilution method	Leaf water extract (10 mg): activity against PA (IZD = 14.35 mm, MIC = 30 µg/mL), PA NCTC10662 (IZD = 10.85 mm, MIC = 30 µg/mL), SA (IZD = 18.20 mm, MIC = 20 µg/mL), SA NCTC6571 (IZD = 13.39 mm, MIC 20 = µg/mL), SP (IZD = 16.8 mm, MIC = 20 µg/mL), and SPN (IZD = 17.6 mm); ethanol extract (10 mg): activity against PA (IZD = 13.86 mm, MIC = 30 µg/mL), PA NCTC10662 (IZD = 10.94 mm, MIC = 35 µg/mL), SA (IZD = 17.82 mm, MIC = 20 µg/mL), SA NCTC6571 (IZD = 13.84 mm, MIC = 20 µg/mL), SP (IZD = 16.58 mm, MIC = 20 µg/mL), and SPN (IZD = 16.79 mm, MIC = 20 µg/mL).	Nigeria	[33]
			MIC	Leaf water extract: activity against MTB H37RV (MIC = 64 mg/mL), MTB RF94 (MIC = 16 mg/mL), and MU 02003 (MIC = 64 mg/mL).	Côte d'Ivoire	[239]

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			Well diffusion technique (well diameter: 6 mm)	Leaf/bark water extract (60 mg/mL): activity against ST (IZD = 11 mm), SA (IZD = 10 mm), KP (IZD = 9 mm), and EC (IZD = 7 mm); ethanol extract (60 mg/mL): activity against ST (IZD = 12 mm), SA and KP (IZD = 10 each), and EC (IZD = 11 mm); ethyl acetate extract (60 mg/mL): activity against ST (IZD = 7 mm), SA and KP (IZD = 10 mm), and EC (IZD = 8 mm); <i>n</i> -hexane extract (60 mg/mL): activity against ST (IZD = 6 mm), SA (IZD = 8 mm), KP (IZD = 5 mm), and EC (IZD = 10 mm).	Nigeria	[240]
109.		<i>Pseudolachnostylis maprouneifolia</i> Pax	Dilution method	Stem bark water extract: activity against EC (MIC = 62.50 µg/mL), SHF (MIC = 15.62 µg/mL), SD and STM (MIC = 31.25 µg/mL each), SEN (MIC = 62.50 µg/mL), no activity against SA (MIC > 500 µg/mL).	Democratic Republic of Congo	[241]
110.	Polygalaceae	<i>Securidaca longipedunculata</i> Fresen.	Cylinder plate technique (100 µg extract / well)	Root bark water extract: activity against SA and EC (MIC = 1000 mg/mL each, ZD = 12 mm each), and PA (MIC = 1000 mg/mL, IZD = 13 mm); methanol extract: activity against EC (MIC = 1000 mg/mL, IZD = 8 mm), no activity against PA and SA.	Uganda	[117]
			Resazurin microplate assay (REMA)	Root acetone extract: no activity against MTB (H37Ra) (MIC > 100 ± 1.2 µg/mL) and MTB 2 (MIC > 100 ± 1.5 µg/mL).	South Africa	[26]
			Broth microdilution method	Root <i>n</i> -hexane extract: activity against MS ATCC 607 (MIC = 500 µg/mL), MTB H37Rv (MIC = 125 µg/mL), MTB H37Ra and MS mc ² (MIC = 62.5 µg/mL), MB BCG (MIC = 31.2 µg/mL), MBA DSM 44156 (MIC = 250 µg/mL), no activity against MBA DSM 44157 (MIC > 250 µg/mL).	Mozambique	[156]
			Microplate serial dilution method (500 µg extract / disc)	Root ethanol extract: no activity against MA. Root bark ethanol extract: activity against PA (IZD = 1 ± 0 mm), no activity against BS, BC, EC, and SA.	Botswana	[204]

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			Disc diffusion method (10 mg extract / disc)	Root petroleum ether, dichloromethane, and ethanol extracts: no activity against SA, EC, and PA.	Tanzania	[242]
			Agar diffusion test (disc diameter: 6 mm)	Root bark <i>n</i> -hexane extract (200 mg/mL): activity against BS (IZD = 14 mm), EC (IZD = 12 mm), and PA (IZD = 10 mm), no activity against SA; chloroform extract: activity against BS (IZD = 20 mm) , SA (IZD = 12 mm), EC (IZD = 30 mm) , and PA (IZD = 11 mm); acetone extract: activity against BS (IZD = 32 mm), SA (IZD = 26 mm) , EC (IZD = 20 mm) , and PA (IZD = 32 mm) ; methanol extract: activity against BS (IZD = 30 mm) , SA (IZD = 26 mm), EC (IZD = 34 mm) , and PA (IZD = 28 mm) .	Ethiopia	[243]
			Well-diffusion assay (well diameter: 4 mm)	Root methanol extract (10 mg/mL): activity against SA (IZD = 1.50 ± 0.41 mm), <i>Streptococcus</i> group A (IZD = 3.50 ± 0.58 mm), no activity against EC and PA.	Zimbabwe	[128]
			Disc diffusion assay (200 µg extract / disc) + Broth microdilution assay	Root aqueous extract: activity against SP (IZD = 20.84 ± 0.22 mm) , MIC = 0.25-1 mg/mL as per strain), no activity against HI, MS, and SA.	South Africa	[140]
			Disc diffusion method (disc diameter: 6 mm)	Stem hot water extract (10 g/L): activity against EC (IZD = 7.2 ± 0.6 mm), SA (IZD = 12.5 ± 2.2 mm), and BS (IZD = 12.5 ± 0.4 mm).	Kenya	[116]
			Broth microdilution method	Not specified methanol extract: no activity against MTB (MIC > 2500 µg/mL), weak activity against MB (MIC = 2125 µg/mL).	Nigeria	[197]

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111.	Polygonaceae	<i>Rumex usambarensis</i> (Dammer) Dammer	Agar dilution streak method	Leaf methanol extract: activity against BS, MS and SA, inactive against PA and SG at concentrations of 1000 µg/mL. Stem and root methanol extracts: no activity against BS, MS, PA, SG and SA at concentrations of 1000 µg/mL	Rwanda	[96]
			Proportion method	Leaf ethanol (95%) extracts: no activity against MTB.	Rwanda	[192]
			Disc diffusion method	Root methanol extract: no activity against NG, NM, SP and SA at concentrations of 1000 µg/mL.	Rwanda	[206]
112.	Polypodiaceae	<i>Phymatosorus scolopendria</i> (Burm. f.) Pic. Serm. (syn <i>Phymatodes scolopendria</i> (Burm. f.) Ching.)	Microbial percent inhibition assay (50 µg extract / well)	Leaf methanol extract: activity against SA (IZD = 7 mm), no activity against EC; hexane: activity against SA (IZD = 2 mm), no activity against EC.	Tonga	[102]
113.	Ranunculaceae	<i>Clematis brachiata</i> Thunb.	Microplate blue assay (MABA)	Root/leaf/stem ethanol extract: no activity against MS (MIC > 1 mg/mL), and PBA (MIC > 0.5 mg/mL)	South Africa	[160]
			MIC assay	Leaf and stem dichloromethane:methanol extract: activity against KP and MS (MIC = 2.00 mg/mL each), MC (MIC = 3.33 mg/mL), and SA (MIC = 6.67 mg/mL); water extract: activity against KP and MS (MIC = 16.00 mg/mL each), SA (MIC = 8 mg/mL), no activity against MC.	South Africa	[230]
			Agar dilution assay	Leaf acetone extract: activity against SA, SE, BC, MCK, SF, EC, PA, SHF, KP, and SM (MIC = 2.0 mg/mL each); methanol extract: activity against SA, SE, BC, MCK, SF, EC, KP, and SM (MIC = 2.0 mg/mL each), PA (MIC = 3 mg/mL), and SHF (MIC = 1 mg/mL); water extract: activity against PA and SHF (MIC = 10 mg/mL), no activity against SA, SE, BC, MCK, SF, EC, KP, and SM.	South Africa	[244]

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			Micro-titre plate dilution assay	<p>Leaf dichloromethane:methanol extract: activity against SM and PG (MIC = 2.00 mg/mL each), SS (MIC = 0.67 mg/mL), and FN (MIC = 1.33 mg/mL), no activity against LA and LC; water extract: activity against SM (MIC = 2 mg/mL), SS (MIC = 6 mg/mL), PG (MIC = 4 mg/mL), no activity against LA, LC and FN.</p> <p>Stem dichloromethane:methanol extract: activity against SM and PG (MIC = 2.00 mg/mL each), SS (MIC = 1.67 mg/mL), LA (MIC = 3.33 mg/mL), LC (MIC = 8 mg/mL), and FN (MIC = 2.67 mg/mL), no activity against SS; water extract: activity against SM (MIC = 4 mg/mL), LA, PG, and FN (MIC = 8 mg/mL), no activity against SS and LC.</p> <p>Flowers dichloromethane:methanol extract: activity against SM and FN (MIC = 2.00 mg/mL each), SS (MIC = 0.83 mg/mL), LC and PG (MIC = 8 mg/mL each), no activity against LA; water extract: activity against SM and SS (MIC = 4 mg/mL each), FN (MIC = 8 mg/mL), no activity against LA, LC, and PG.</p>	South Africa	[143]
114.		<i>Clematis hirsuta</i> Guill. & Perr. var. <i>hirsuta</i>	Agar dilution streak method	Leaf and stem methanol extracts: no activity against BS, MS, PA, SG and SA at concentrations of 1000 µg/mL	Rwanda	[96]
115.	Rhamnaceae	<i>Rhamnus prinoides</i> L'Hér.	Broth microdilution method	Leaf acetone extract: activity against MS and MTB (TB8104) (MIC = 0.625 mg/mL each), MF (MIC = 2.5 mg/mL), no activity against MA (MIC > 2.5 mg/mL)	South Africa	[145]
			Resazurin based microtitre dilution technique	Leaf methanol (80%) extract: activity against SA (MIC = 2.03 mg/mL), SP (MIC = 4.06 mg/mL), SPN (MIC = 8.13 mg/mL), SHF (MIC = 4.06 mg/mL for standard strain and 5.42 ± 1.36 mg/mL for clinically isolated strain), EC (MIC = 8.13 mg/mL), and ST (MIC = 4.06 mg/mL); methanol fraction: activity against SA and SP (MIC = 8.13 mg/mL each), SPN, SF, PA, and ST (MIC = 16.25 mg/mL each), and EC (MIC = 32.50 mg/mL); chloroform fraction: activity against SA and SP (MIC = 8.13 mg/mL for standard strain	Ethiopia	[245]

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				and 16.2 mg/mL for clinically isolated strain each), SPN, SHF, and ST (MIC = 16.25 mg/mL), no activity against EC and PA.		
116.		<i>Scutia myrtina</i> (Burm. f.) Kurz	Agar disc diffusion method	Whole plant extract: no activity against NG and HD.	India	[246]
			Agar diffusion method and two folds serial dilution method	Entire plant petroleum ether extract (IZD at conc. 1000 µg/mL): activity against PA (IZD = 24 mm, MIC = 125 µg/mL) , EC (IZD = 20 mm, MIC = 125 µg/mL) ST (IZD = 24 mm, MIC = 500 µg/mL) , SA (IZD = 18 mm, MIC = 500 µg/mL), SP (IZD = 19 mm), BS (IZD = 20 mm) ; methanol extract (IZD at con. 1000 µg/mL): activity against: PA (IZD = 15 mm, MIC = 250 µg/mL), EC (IZD = 11 mm, MIC = 250 µg/mL) ST (IZD = 16 mm, MIC = 500 µg/mL), SA (IZD = 10 mm, MIC = 500 µg/mL), SP (IZD = 11 mm), BS (IZD = 11 mm);	India	[247]
117.		<i>Ziziphus abyssinica</i> Hochst. ex A. Rich.	n.d.	Fresh fruit methanol extract: activity against SA (IZD = 15.6 ± 0.7 mm for 200 mg/mL and 9.0 ± 0.8 mm for 100 mg/mL), PA (IZD = 11.3 ± 0.3 mm for 200 mg/mL and < 9 mm for 100 mg/mL), and EC (IZD = 12.7 ± 0.3 mm for 200 mg/mL and 10.7 ± 0.5 mm for 100 mg/mL, MIC = 25 mg/mL); water extract: active against SA (IZD = 14.7 ± 0.3 mm for 200 mg/mL and < 9 mm for 100 mg/mL, MIC = 3.1 mg/mL), PA (IZD < 9 mm, MIC = 50 mg/mL), and EC (IZD = 13.0 ± 0.6 mm for 200 mg/mL and 9.7 ± 0.5 for 100 mg/mL, MIC = 25 mg/mL).	Kenya	[248]
			Broth dilution method	Root/bark methanol (70%) extract: activity against BC (MIC = 28.75 mg/mL), no activity against ML, PA and EC.	Kenya	[164]
118.		<i>Ziziphus pubescens</i> Oliv	Disc diffusion method (0.5 mg extract /disc)	Leaf extract: petrol and ether fractions active against SA (IZD = 10-15 mm each); chloroform fraction active against SA (IZD = 20-25 mm) .	Tanzania	[118]

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119.	Rubiaceae	<i>Crossopteryx febrifuga</i> (Afzel. ex G. Don) Benth.	Liquid dilution method	Stem bark <i>n</i> -hexane extract: activity against BC and SA (MIC = 0.5 mg/mL each), STM (MIC = 1 mg/mL), no activity against KP, PA and EC.	Tanzania	[109]
			Dilution assay	Stem bark methanol extract: active against EA, EC, and SA (MIC = 1024 µg/mL), and KP (MIC= 512 µg/mL).	Cameroon	[109]
120.		<i>Pavetta crassipes</i> K. Schum.	Disc-plate method (750 µg extract / test)	Leaf ethanol extract (1-8 mg/mL): activity against SA (IZD = 8-13 mm) and PA (IZD = 8 mm at all conc.); no activity against KP (IZD = 8 mm at 1 mg/mL, otherwise 0 mm) and <i>Proteus</i> spp. (IZD = 7 mm at 1 mg/mL, otherwise 0 mm); chloroform extract (1-8 mg/mL): activity against SA (IZD = 7 mm at 5 and 8 mg/mL, otherwise 0 mm), <i>Proteus</i> spp. (IZD = 7-19 mm), no activity against KP and PA.	Nigeria	[249]
			Micro plate agar dilution method	Leaf <i>n</i> -hexane extract: no activity against MA (MIC > 1000 µg/mL); dichloromethane extract: no activity against MA (MIC > 1000 µg/mL); methanol extract: activity against MA (MIC = 250 µg/mL); water extract: no activity against MA (MIC > 1000 µg/mL).	Nigeria	[250]
			Well diffusion technique (well diameter: 6 mm)	Leaf/bark water extract (60 mg/mL): activity against ST, SA, and KP (IZD = 10 mm each), and EC (IZD = 7 mm); ethanol extract (60 mg/mL): activity against ST and SA (IZD = 10 each), KP (IZD 0 7 mm), and EC (IZD = 9 mm); ethyl acetate extract (60 mg/mL): activity against ST, SA, and KP (IZD = 7 mm), and EC (IZD = 8 mm); <i>n</i> -hexane extract (60 mg/mL): activity against ST (IZD = 8 mm), SA and KP (IZD = 9 mm each), and EC (IZD = 10 mm).	Nigeria	[240]
121.		<i>Rubia cordifolia</i> L.	Agar dilution streak method	Whole plant methanol extract: no activity against BS, MS, PA, SG and SA at concentrations of 1000 µg/mL	Rwanda	[96]
			Disc diffusion method	Whole plant methanol extract: weak activity against NG, NM, SP and SA at concentrations of 1000 µg/mL.	Rwanda	[206]

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			Two fold microdilution method	Stem bark ethanol extract: activity against MMA (MIC = 2.5 mg/mL), and MIP (MIC = 1.25 mg/mL).	Tanzania	[169]
			Agar-disc diffusion method (20 µg extract / disc)	Root methanol (70%) extract: activity against SA (IZD = 6 ± 0.5 mm), BS (IZD = 16 ± 0.6 mm), SE (IZD = 7 ± 0.3 mm), SF (IZD = 14 ± 0.6 mm), BC (IZD = 14 ± 0.3 mm), VP (IZD = 10 ± 0.6 mm), PA (IZD = 7 ± 0.5 mm), STM (IZD = 6 ± 0.4 mm), and EC (IZD = 13 ± 0.4 mm).	China	[41]
122.	Rutaceae	<i>Citrus limon</i> (L.) Osbeck	Micro-titre plate dilution assay	Essential oil micelle solution: activity against SA MSSA ATCC 29213, SA MRSA ATCC 43300, and EC (MIC = 6.3% each), EF, KP, and PA (MIC = 12.5% each); aqueous phase: activity against SA MSSA ATCC 29213 and KP (MIC = 25% each), SA MRSA ATCC 43300, EF, and EC (MIC = 50% each), no activity against PA (MIC > 50%).	n.d.	[251]
			Disc diffusion method (0.1 mL essential oil / disc)	Unripe lemon peel oil: activity against BS (IZD = 8.60 ± 0.52 mm), EC (IZD = 15.14 ± 0.24 mm), SA (IZD = 15.33 ± 0.70 mm), and SPM (IZD = 14.83 ± 0.09 mm). Ripened lemon peel oil: activity against BS (IZD = 13.63 ± 0.55 mm), EC (IZD = 19.07 ± 0.12 mm), SA (IZD = 17.00 ± 0.53 mm), and SPM (IZD = 15.85 ± 0.49 mm).	Pakistan	[252]
			E-test method	Leaf essential oil: activity against SA and BS (MIC = 200 µg/mL each), and EC (MIC = 400 µg/mL), no activity against ST.	Iran	[253]
			Agar diffusion (hole diameter: 8 mm) and serial dilution methods	Essential oil (IZD at 100 µg/mL): activity against SA (IZD = 22.1 ± 2.46 mm, MIC = 12.5 µg/mL), BS (IZD = 23.5 ± 2.32 mm, MIC = 6.25 µg/mL), PA (IZD = 19.5 ± 1.62 mm, MIC = 12.5 µg/mL), and EC (IZD = 8.2 ± 1.30 mm, MIC = 50 µg/mL).	India	[38]

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			MIC assay	Leaf dichloromethane:methanol extract: activity against KP and MC (MIC = 2.67 mg/mL each), MS (MIC = 2.00 mg/mL), and SA (MIC = 5.33 mg/mL); water extract: no activity against KP, MC, MS, and SA (MIC > 16.00 mg/mL each).	South Africa	[230]
			Disc diffusion method	Peel oil: activity against EC and SA (IZD = 14 mm each), KP, BC, and MS (IZD = 13 mm each), ML (IZD = 12 mm), PV and LM (IZD = 16 mm), and PA (IZD = 10 mm).		[254]
123.		<i>Fagara chalybaea</i> Engl. (Engl.)	Disc diffusion method (0.5 mg extract /disc)	Root bark extract: petrol fraction active against SA (IZD = 10-15 mm); ether fraction active against SA (IZD = 20-25 mm) ; chloroform fraction active against SA (IZD = 10-20 mm) .	Tanzania	[118]
124.		<i>Gardenia ternifolia</i> subsp. <i>jovis-tonantis</i> (Welw.) Verdc.	Micro-dilution method	Leaf ethanol (95%) and aqueous extract (obtained via repeated extraction by cold percolation): anthocyanins extract active against EC (MIC = 125 µg/mL), and SA (MIC = 62.5 µg/mL); organic acids extract active against EC (MIC = 125 µg/mL), and SA (MIC = 125 µg/mL).	Democratic Republic of the Congo	[255]
125.		<i>Harrisonia abyssinica</i> Oliv	Liquid dilution method	Root <i>n</i> -hexane extract: activity against BC (MIC = 0.0625 mg/mL) and SA (MIC = 0.125 mg/mL). Root methanol extract: activity against BC (MIC = 0.125 mg/mL) and SA (MIC = 0.0625 mg/mL).	Tanzania	[109]
			Agar diffusion antimicrobial assay (10 µg extract / disc)	Ripe berry methanol-dichloromethane (1:1) extract: activity against BC (IZD = 35 ± 1 mm) , EC (IZD = 30 ± 2 mm), STM (IZD = 10 ± 1 mm), SA (IZD = 20 ± 2 mm) , and LC (IZD = 17 ± 1 mm).	Kenya	[256]

SNo.	FAMILY	PLANT NAME	METHOD OF ANTI-MICROBIAL ACTIVITY TEST EMPLOYED	ANTIMICROBIAL ACTIVITY OF EXTRACT	COUNTRY	BOOK OR JOURNAL REFERENCE
			Broth dilution method	Leaf/bark methanol (70%) extract: activity against ML (MIC = 25 mg/mL), BC (MIC = 15.6 mg/mL), PA (MIC = 37.5 mg/mL each), and EC (MIC = 150 mg/mL).	Kenya	[164]
126.		<i>Toddalia asiatica</i> (L.) Lam.	Disc diffusion method (10 µL essential oil / disc) and turbidimetric or tube dilution method	Essential oil: activity against BC (IZD = 25.33 ± 0.88 mm, MIC = 3.13% essential oil), SA (IZD = 21.67 ± 1.45 mm, MIC = 25.00% essential oil), EC (IZD = 34.00 ± 2.65 mm, MIC = 12.25% essential oil), and MR SA (IZD = 20.00 ± 1.15 mm, MIC = 6.25% essential oil).	Kenya	[257]
			Agar disc diffusion method (impregnation with 300 mg extract/mL), BACTEC MGIT™ 960 system	Plant methanol extract: activity against MK, MTB, MF, and MS (complete inhibition at a conc. of 2 mg/mL), ST (IZD = 6.33 mm), SA (IZD = 8.66 mm), EC (IZD = 7 mm), PA (IZD = 10.66 mm), and KP (IZD = 6.00 mm).	Kenya	[196]
			Dics (250 µg extract / disc) and tube doubling dilution methods	Root petroleum ether fraction: activity against SA (IZD = 8.13 ± 0.18 mm, MIC = 50 mg/mL), SA MR (IZD = 9.21 ± 0.18 mm, MIC = 25 mg/mL), no activity against SA ESBLs; ethyl acetate fraction: activity against SA (IZD = 8.06 ± 0.13 mm, MIC = 50 mg/mL), SA MR (IZD = 8.00 ± 0.18 mm, MIC = 50 mg/mL), no activity against SA ESBLs; methanol fraction: activity against SA (IZD = 7.95 ± 0.28 mm, MIC = 50 mg/mL), no activity against SA MR and SA ESBLs.	China	[258]

SNo.	FAMILY	PLANT NAME	METHOD OF ANTI-MICROBIAL ACTIVITY TEST EMPLOYED	ANTIMICROBIAL ACTIVITY OF EXTRACT	COUNTRY	BOOK OR JOURNAL REFERENCE
			Disc diffusion test (250 µg extract / disc)	Root petroleum ether extract: activity against SA (IZD = 8 mm), MR SA (IZD = 9 mm); ethyl acetate extract: activity against SA (IZD = 8 mm), low or no activity against MR SA; DMSO extract: low or no activity against SA and MR SA. All extracts showed no activity against extended-spectrum β-lactamase positive SA.	China	[259]
			Agar disc diffusion assay	Root water extract (50 µg/disc): activity against EC, SP, and SAL (IZD = 16 mm each), SHF and SA (IZD = 17 mm), XM, PV, CV, and SP (IZD = 15 mm each); water extract (100 µg/disc): activity against EC, ST, SHF, CV, SA, and SAL (IZD = 18 mm each), XM, PV, and SP (IZD = 17 mm each).	India	[260]
			Disc diffusion method (1.25 – 5 mg extract / disc)	Leaf <i>n</i> -hexane extract: activity against SA (IZD = 17-30 mm) and SE (IZD = 13-20 mm), no activity against BS, EF, EC, PA, KP, EAM, and PV; chloroform extract: activity against SA (IZD = 12-18 mm) and SE (IZD = 11-19 mm), no activity against BS, EF, EC, PA, KP, EAM, and PV; ethyl acetate extract: activity against SA (IZD = 18-32 mm), SE (IZD = 12-23 mm), BS (IZD = 11-16 mm), EF (IZD = no activity -12 mm), PA (IZD = 8-12 mm), no activity against EC, KP, EAM, and PV; methanol extract: activity against SA (IZD = no activity-15 mm), SE (IZD = no activity-16 mm), BS (IZD = no activity- 0 mm), EF (IZD = no activity-9 mm), no activity against EC, PA, KP, EAM, and PV; water extract: activity against SA (IZD = no activity-10 mm), SE (IZD = no activity-12 mm), no activity against BS, EF, EC, PA, KP, EAM, and PV.	India	[261]
127.		<i>Zanthoxylum chalybeum</i> Engl.	Broth microdilution method	Stem bark ethanol (80%) extract: no activity against EF, SA, EC, and PA.	Uganda	[147]

SNo.	FAMILY	PLANT NAME	METHOD OF ANTI-MICROBIAL ACTIVITY TEST EMPLOYED	ANTIMICROBIAL ACTIVITY OF EXTRACT	COUNTRY	BOOK OR JOURNAL REFERENCE
			Two fold microdilution method	Stem bark dichloromethane extract: activity against MMA (MIC = 1.25 mg/mL) and MIP (MIC = 2.5 mg/mL); methanol extract: activity against MMA (MIC = 1.25 mg/mL) and MIP (MIC = 2.5 mg/mL).	Tanzania	[262]
			Agar well diffusion method (12.5 mg extract/well)	Root hot water extract: activity against BC (IZD = 21.67 ± 1.20 mm), no activity against SA and EC (IZD < 8.00 mm).	Kenya	[191]
			Paper disc assay, agar assay	Stem water, petroleum ether and ethanol extracts: no activity against SA and EC in both assays. Seed water, petroleum ether and ethanol extracts: no activity against SA and EC in both assays.	Uganda	[150]
128.	Smilacaceae	<i>Smilax anceps</i> Willd.	Agar dilution method	Aerial part methanol extract: activity against SA (MIC = 2 mg/mL), EC; PA, and ST (MIC = 8 mg/mL).	Mauritius	[263]
129.	Solanaceae	<i>Solanum incanum</i> L.	Agar dilution streak method	Leaf and stem methanol extracts: no activity against BS, MS, PA, SG and SA at concentrations of 1000 µg/mL	Rwanda	[96]
			Disc diffusion method	Fruit methanol extract: no activity against NG, NM, SP and SA at concentrations of 1000 µg/mL.	Rwanda	[206]
			Micro-titer plate dilution technique	Leaf dichloromethane:methanol (1:1) extract: activity against SA, SE, and PA (MIC = 0.5 mg/mL each), SA MR and SA GMR (MIC = 1.0 mg/mL each); water extract: no activity against SA, SA MR, SA GMR, and PA (MIC > 16 mg/mL each).	southern Africa	[32]
			Broth microdilution method	Fruit ethanol extract: no activity against EF, SA, EC, and PA.	Ethiopia	[124]

SNo.	FAMILY	PLANT NAME	METHOD OF ANTI-MICROBIAL ACTIVITY TEST EMPLOYED	ANTIMICROBIAL ACTIVITY OF EXTRACT	COUNTRY	BOOK OR JOURNAL REFERENCE
			Disc diffusion method (0.5 mg extract /disc)	Whole plant extract: petrol, ether and chloroform fractions not active against SA.	Tanzania	[118]
			Agar diffusion technique	Fruit dichloromethane extract: activity against BC (MIC = 1000 µg/mL), no activity against SA, MCF, EC, and PA; methanol extract: activity against BC (MIC = 1000 µg/mL), and MCF (MIC = 500 µg/mL), no activity against SA, EC, and PA; water extract: activity against BC, EC, and PA (MIC = 1000 µg/mL each), no activity against SA and MCF.	Yemen	[36]
			Bacteria assay on agar plates	Fruit methanol extract: activity against BC, BP, and BS (MIC = 0.5 mg/mL each), MCK, SA, EBC and SRM (MIC = 5 mg/mL each), no activity against EA, EC, and PV; acetone extract: activity against BP, BS, MCK, SA, and EBC (MIC = 5 mg/mL each), no activity against EA, EC, PV, and SRM; water extract: no activity against BC, BP, BS, MCK, SA, EBC, EA, EC, PV, and SRM.	Zimbabwe	[202]
			Agar diffusion method	Fruit hot water extract: activity against SM serotype c (MT 5091) and serotype d (OMZ 176) (MIC = 62.5 mg/mL each).	Taiwan	[173]
130.	Verbenaceae	<i>Lantana camara</i> L. (see Al-Snafi, 2019 for an overview)	Agar well diffusion method	Leaf methanol extract: activity against MTB (H37Rv) (MIC = 20 µg/mL) , and MTB (TMC-331) and wild strain (MIC= 15 µg/mL) .	Uganda	[29]
			Microdilution method	Leaf ethanol extract: activity against EC ATCC25922 and EC Ec27, and PA (MIC = 256 µg/mL each), PV and VC (MIC = 128 µg/mL), and SA Sa 358 (MIC = 512 µg/mL), no activity against SA ATCC 12692 (MIC ≥ 1,024 µg/mL). Root ethanol extract: activity against EC ATCC 52922 (MIC = 512 µg/mL), PV (MIC = 64 µg/mL), and PA (MIC = 128 µg/mL), no activity against VC, SA ATCC 12692, EC Ec 27, and SA Sa 358 (MIC ≥ 1,024 µg/mL each).	Brazil	[264]

SNo.	FAMILY	PLANT NAME	METHOD OF ANTI-MICROBIAL ACTIVITY TEST EMPLOYED	ANTIMICROBIAL ACTIVITY OF EXTRACT	COUNTRY	BOOK OR JOURNAL REFERENCE
			Two-fold serial dilution microplate method	Leaf acetone extract: activity against EC (MIC = 3.1 mg/mL), EF (MIC = 1.6 mg/mL), and PA (MIC = 3.1 mg/mL).	South Africa	[205]
			Agar disc diffusion method with 300 mg extract/mL), BACTEC MGIT™ 960 system	Plant methanol extract: activity against MK, MTB, MF, and MS (complete inhibition at a conc. of 2 mg/mL), ST (IZD = 6.66 mm), SA (IZD = 9 mm), EC (IZD = 6 mm), PA (IZD = 8.66 mm), and KP (IZD = 7.33 mm).	Kenya	[196]
			Agar-well diffusion method	Leaf methanol extract: activity against SA and PA (MIC = 5 mg/mL each), BS and KP (MIC = 8 mg/mL each); ethanol extract: activity against SA (MIC = 6.5 mg/mL), BS (MIC = 10 mg/mL), PA (MIC = 8 mg/mL), and KP (MIC = 12 mg/mL); water extract: active against SA (MIC = 8 mg/mL), and PA (MIC = 10 mg/mL).	Pakistan	[265]
			Agar diffusion method	Leaf ethanol (80%) extract: activity against EC (MIC = 25 mg/mL), PA (MIC = 12.5 mg/mL), BS and SA (MIC = 6.25 mg/mL each).	India	[103]
131.	Vitaceae	<i>Cyphostemma adenocaula</i> (Steud. ex A. Rich.) Desc. ex Wild & R.B.Drumm	Well diffusion antimicrobial activity (5 µg extract/well)	Leaf and stem methanol extract: poor activity against EC, SA; non-confluent microbial lawn growth in the area of the well in case of SF.	Uganda	[183]
			Agar well diffusion method	Root water extract (50 mg/mL): activity against SA (IZD = 15 mm), no activity against BS and EC.	Somalia	[104]

SNo.	FAMILY	PLANT NAME	METHOD OF ANTIMICROBIAL ACTIVITY TEST EMPLOYED	ANTIMICROBIAL ACTIVITY OF EXTRACT	COUNTRY	BOOK OR JOURNAL REFERENCE
				(hole diameter: 10 mm)		
132.	Xanthorrhoeaceae	<i>Aloe secundiflora</i> Engl.	BACTEC MGIT™ 960 system and Agar disc diffusion method	Leaf methanol extract: high antimycobacterial activity against MK, MF, and MS (0 GUs each), and activity against MTB (157 GUs at 0.5 mg/mL); activity against ST, SA, EC and PA (IZD ≥ 9.00 mm); activity against ST, SA (MIC = 37.5 mg/mL each, MBC = 37.5 mg/mL each), EC (MIC = 18.75 mg/mL, MBC = 18.75 mg/mL), and PA (MIC = 9.375 mg/mL, MBC = 18.75 mg/mL).	Kenya	[153]
			Broth dilution method	Whole plant methanol (70%) extract: activity against BC (MIC = 7.8 mg/mL), PA and EC (MIC = 250 mg/mL each), no activity against ML.	Kenya	[164]
			Microtitre dilution technique	Whole plant methanol (80%) extract: activity against SA, BS, ST, EC, and PA (MIC = 3.75 mg/50 µL each).	Kenya	[152]
133.	Zygophyllaceae	<i>Balanites aegyptiaca</i> (L.) Delile	Agar well diffusion (stock solutions for IZD detection: 250 mg/mL) / microdilution methods	Bark petroleum ether: activity against EC (IZD = 16.0±1.00 mm, MIC = 150 µg/mL), SA (IZD = 22.0±1.00 mm, MIC = 470 µg/mL), no activity against PA (IZD = 0.0±0.00 mm); methanol extract: activity against EC, SA and PA (IZD = 0.0±0.00 mm).	Uganda	[154]
			Liquid dilution method	Leaf <i>n</i> -hexane extract: activity against BC (MIC = 0.25 mg/mL) and SA (MIC = 1 mg/mL); methanol extract: activity against BC (MIC = 0.5 mg/mL), and SA (MIC = 1 mg/mL). Stem bark <i>n</i> -hexane extract: activity against BC (MIC = 1 mg/mL), no activity against SA; methanol extract: no activity against BC and SA.	Tanzania	[109]

SNo.	FAMILY	PLANT NAME	METHOD OF ANTI-MICROBIAL ACTIVITY TEST EMPLOYED	ANTIMICROBIAL ACTIVITY OF EXTRACT	COUNTRY	BOOK OR JOURNAL REFERENCE
			Broth dilution method	<p>Leaf dichloromethane extract: activity against MA (MIC = 12.5 mg/mL); ethylacetate extract: no activity against MA (MIC > 25 mg/mL); ethanol extract: activity against MA (MIC = 3.12 mg/mL).</p> <p>Bark dichloromethane and ethanol extract: activity against MA (MIC = 12.5 mg/mL each); ethylacetate extract: no activity against MA (MIC > 25 mg/mL).</p> <p>Root dichloromethane extract: activity against MA (MIC = 25 mg/mL); ethylacetate and ethanol extract: activity against MA (MIC = 12.5 mg/mL each).</p>	Sudan	[266]
			Microtitre dilution technique	Root methanol (80%) extract: activity against SA, BS, ST, and PA (MIC = 1.875 mg/50 µL each), and EC (MIC = 3.75 mg/50 µL)	Kenya	[135]
			Broth microdilution method	Aerial parts methanol (70%) extract: activity against SRM (MIC = 0.90 mg/mL), no activity against EC, PM, SHF, SPT, SEN, KP, and SA (MIC > 2.50 mg/mL each).	Togo	[136]

Footnote:

1. Some non-respiratory causing bacteria were included if mentioned in the cited publication
2. Acronymy for bacteria are

AA = *Actinobacillus actinomycetemcomitans*, AB = *Acinetobacter baumannii*, ABA = *Acinetobacter anitratus*, AC = *Acinetobacter cacloaceticus*, AI = *Actinomyces israelii*, AN = *Actinomyces naeslundii*, AV = *Actinomyces viscosus*, BA = *Bacillus anthracis*; BAU = *Bacillus aureus*, BB = *Bacillus brevis*; BBS = *Bordetella bronchiseptica*, BC = *Bacillus cereus*; BL = *Bacillus licheniformis*, BM = *Bacillus megaterium*, BP = *Bacillus pumilus*, BS = *Bacillus subtilis*, BT = *Bacillus thuringiensis*, BBA = *Brevibacterium agri*, BBL = *Brevibacterium linens*, CD = *Chlamydia diphtheriae*, CF = *Citrobacter freundii*, CG = *Corynebacterium glutamicum*, CP = *Chlamydia pneumoniae*, CV = *Chromobacterium violaceum*, EA = *Enterobacter aerogenes*, EAM = *Erwinia amylovora*, EBC = *Enterobacter cloacae*, EC = *Escherichia coli*, EF = *Enterococcus faecalis*, EH = *Enterococcus hirae*, FN = *Fusobacterium nucleatum*, HD = *Haemophilus ducreyi*, HI = *Haemophilus influenzae*, KA = *Klebsiella aerogenes*, KO = *Klebsiella oxytoca*, KP = *Klebsiella pneumoniae*, KPC = *Klebsiella planticola*, LA = *Lactobacillus acidophilus*, LC = *Lactobacillus casei*, LM = *Listeria monocytogenes*, MA = *Mycobacterium aurum*, MB = *Mycobacterium bovis*, MBA = *Mycobacterium avium*, MBC = *Mycobacterium*

chelonae, MC = *Moraxella catarrhalis*, MCF = *Micrococcus flavus*, MCK = *Micrococcus kristinae*, MF = *Mycobacterium fortuitum*, MI = *Mycobacterium intracellulare*, MIP = *Mycobacterium indicus pranii*, MK = *Mycobacterium kansasii*, ML = *Micrococcus luteus*, MM = *Morganella morganii*, MMA = *Mycobacterium madagascariense*, MP = *Mycobacterium phlei*, MS = *Mycobacterium smegmatis*, MT = *Mycobacterium terrae*, MTB = *Mycobacterium tuberculosis*, MU = *Mycobacterium ulcerans*, NG = *Neisseria gonorrhoeae*, NM = *Neisseria meningitidis*, PA = *Pseudomonas aeruginosa*, PBA = *Propionibacterium acnes*, PC = *Pseudomonas cichorii*, PF = *Pseudomonas fluorescens*, PG = *Porphyromonas gingivalis*, PI = *Prevotella intermedia*, PM = *Proteus mirabilis*, PP = *Pseudomonas putida*, PS = *Providencia stuartii*, PV = *Proteus vulgaris*, SA = *Staphylococcus aureus*, SA GMR = Gentamycin-methicillin resistant *Staphylococcus aureus*, SA MR = Methicillin-resistant *Staphylococcus aureus*, SAB = *Salmonella abony*, SAE = *Salmonella enterica*, SAG = *Streptococcus agalactiae*, SAL = *Staphylococcus albus*, SAU = *Staphylococcus auricularis*, SD = *Shigella dysenteriae*, SE = *Staphylococcus epidermidis*, SE MR = Methicillin resistant *Staphylococcus epidermidis*, SEN = *Salmonella enteritidis*, SF = *Streptococcus faecalis*, SG = *Salmonella gallinarum*, SH = *Staphylococcus haemolyticus*, SHB = *Shigella boydii*, SHF = *Shigella flexneri*, SHS = *Shigella sonnei*, SL = *Streptococcus lactis*, SM = *Streptococcus mutans*, SP = *Streptococcus pyogenes*, SPN = *Streptococcus pneumoniae*, SPT = *Salmonella paratyphi*, SRM = *Serratia marcescens*, SS = *Streptococcus sanguis*, SSP = *Staphylococcus saprophyticus*, ST = *Salmonella typhi*, STM = *Salmonella typhimurium*, VC = *Vibrio cholerae*, XM = *Xanthomonas maltophilia*, YE = *Yersenia enterocolitica*

GFPMA = Green Fluorescent Protein Reporter Microplate Assay. MDR = multi drug resistant, MIC = minimum inhibitory concentration, MIQ = minimum inhibition quantities, n.d. = not defined, IZD = inhibition zone diameter

Table S3: Natural products with antimicrobial activity from selected plants traditionally used against infective diseases of respiratory tract in Tanzania (see Table S1)

Plants with high activity (MIC ≤ 50 µg/mL, IZD ≥ 20 mm) are in marked bold.

S. No.	Family	Plant name	Bioactivity of compound against tested microorganism	Book or Journal reference
1.	Anacardiaceae	<i>Mangifera indica</i> L.	Mangiferin (20%): activity against BP (IZD = 20 ± 0.40 mm) , BC (IZD = 17 ± 0.54 mm), SA (IZD = 17 ± 0.40 mm), SC (IZD = 15 ± 0.20 mm), SLA (IZD = 26 ± 0,30 mm) , EC (IZD = 12 ± 0.20 mm at 35 % mangiferin, IZD = 0 mm at lower conc.), KP (IZD = 20 ± 0.40 mm) at 30 % mangiferin, IZD = 0 mm at lower conc.), no activity of PA at any conc. Mangiferin (25%): activity against BP (IZD = 23 mm) , BC (IZD = 18 mm), SLV (IZD = 29 mm) , no activity against PA.	[43] [44]
2.		<i>Ozoroa mucronata</i> (Bernh.) R. Fern & A. Fern.	Moronic acid : activity against SA (MIC = 6.25 µg/mL) and BS (MIC = 12.5 µg/mL) ; no activity against PV, EC, and PA.	[114]
3.		<i>Rhus natalensis</i> Bernh. ex C. Krauss. F.A.Barkley)	Rhuschromone (3-(1-(2,4-dihydroxyphenyl)-3,3-bis(4-hydroxyphenyl)-1-oxopropan-2-yl)-7-methoxy-4H-chromen-4-one): activity against SA (IZD = 21 mm) , no activity against EC and PA. 2', 4'-Dihydroxychalcone-(4-O-5''')-4'',2''',4'''-Trihydroxychalcone : activity against SA (IZD = 17 mm), no activity against EC and PA. 3-((Z)-Heptadec-13-enyl) benzene-1, 2-diol : activity against SA (IZD = 9 mm), no activity against EC and PA. Epicatechin : activity against BS (IZD = 14 ± 0.2 mm), SA (IZD = 15 ± 0.3 mm), PA (IZD = 10 ± 0.2 mm), and EC (IZD = 11 ± 0.3 mm). 3β-Sitosterol : activity against BS (IZD = 7 ± 0.3 mm), SA (IZD = 8 ± 0.2 mm), no activity against PA and EC. 3β-Sitosterol glucoside : activity against BS (IZD = 13 ± 0.3 mm), SA (IZD = 14 ± 0.2 mm), and EC (IZD = 10 ± 0.2 mm), no activity against PA. Stigmasterol : activity against BS and SA (IZD = 8 ± 0.2 mm each), no activity against PA and EC. Lupeol : activity against BS (IZD = 11 ± 0.2 mm), SA (IZD = 14 ± 0.4 mm), and EC (IZD = 8 ± 0.1 mm), no activity against PA.	[267] [268]
4.	Annonaceae	<i>Annona senegalensis</i> Pers.	Catechin : weak activity against SM (MIC = 2.0 mg/mL). Anonaine : significant activity SM (MIC = 0.12 mg/mL) Asimilobine : weak activity against SM (MIC = 2.0 mg/mL). Nornantenine : activity against SM (MIC = 0.25 mg/mL).	[269]

S. No.	Family	Plant name	Bioactivity of compound against tested microorganism	Book or Journal reference
			Kaurenoic acid (kaur-16-en-19-oic acid): activity against BS (IZD = 16 ± 0 mm, MIC = 30 µg/mL), SA (IZD = 17 ± 0 mm, MIC = 150 µg/mL), no activity against PA, SPT, and EC.	[270]
5.	Apocynaceae	<i>Rauvolfia caffra</i> Sond.	Rauvolfianine ; activity against isoniazid resistant strain MTB AC 45 (MIC = 7.8125 µg/mL). Oleanolic acid : activity against MTB AC45 (MIC = 31.25 µg/mL). Sitosterol-3-O-β-D-glucopyranoside : activity against MTB AC45 (MIC = 62.5 µg/mL). Betulinic acid : activity against MTB AC45 (MIC = 62.5 µg/mL). D-Fructofuranosyl-β-(2→1)-α-D-glucopyranoside : activity against MTB AC45 (MIC = 125 µg/mL).	[271]
6.	Bignoniaceae	<i>Kigelia africana</i> (LAM.) BENTH. (Syn. <i>Kigelia pinnata</i> (Jacq.) DC)	Kigelinone : activity against SA and BS (MIC = 100 µg/mL each), CBD (MIC = 50 µg/mL). Isopinnatal, dehydro-α-lapachone, lapachol, p-coumaric acid, ferulic acid, caffeic acid : all active against SA and BS (MIC = 200 µg/mL each), and CBD (MIC = 100 µg/mL). Kojic acid ; activity against EC (IZD = 6 mm, MIC = 0.83 mg/mL), PA (IZD = 8 mm, MIC = 0.21 mg/mL), ST (IZD = 6 mm, MIC = 0.10 mg/mL), and SA (IZD = 11 mm, MIC = 0.21 mg/mL). 2-acetylfuro-1,4-naphthoquinone : activity against PA and SA (IZD = 6 mm each), no activity against EC and ST. p-Coumaric acid : activity against EC, PA, SA (IZD = 6 mm, MIC > 0.83 mg/mL), and ST (IZD = 7 mm, MIC = 0.41 mg/mL). Caffeic acid : activity against EC (IZD = 6 mg/mL, MIC > 0.83 mg/mL), no activity against PA, SA, and ST. Nonacosanoic acid : activity against EC and PA (IZD = 6 mm each, MIC > 0.83 mg/mL each), no activity against ST and SA. Kigelinol : activity against EC (IZD = 6 mm), and SA (IZD = 8 mm), no activity against PA and ST. β-Friedelinol : activity against PA and SA (IZD = 6 mm, MIC > 0.83 mg/mL), no activity against EC and ST. Pomolic acid : activity against PA (IZD = 7 mm), no activity against EC, ST, and SA. (IZD measured at 2 mg/disc)	[272] [131]
7.		<i>Stereospermum kunthianum</i> Cham.	Ipolamiide : activity against SA, SPN, KP, EC, and ST (IZD = 21–29 mm each), no activity against SD and SA MR.	[273]
8.	Boraginaceae	<i>Cordia africana</i> Lam.	Oleanolic acid : moderate activity (IC ₅₀ = 14.44 µg/mL) against vancomycin-resistant ECF; no activity against SA MR, EC, PA, and KP. 13 3-β-Lup-20(29)-en-3-ol, stigmast-5,22-dien-3β-ol, 2-(2Z) -(3-hydroxy-3,7-dimethylocta-2,6-dienyl)-1,4-benzenediol, 17 benzaldehyde derivative, 4-hydroxy-3-methoxy-benzaldehyde, isoflavone 7-hydroxy-4'-methoxyisoflavone and ubiquinone-8, 1-octacosanol : no activity against vancomycin-resistant ECF, SA MR, EC, PA, and KP.	[274]

S. No.	Family	Plant name	Bioactivity of compound against tested microorganism	Book or Journal reference
9.	Canellaceae	<i>Warburgia salutaris</i> (Bertol.f.) Chiov.	<p>Drimenol: activity against KP (MIC = 0.208 mg/mL), MC and SA (MIC = 0.062 mg/mL each), PA (MIC = 0.312 mg/mL).</p> <p>E-nerolidol: activity against KP (MIC = 0.312 mg/mL), MC (MIC = 0.031 mg/mL), PA (MIC = 0.260 mg/mL), and SA (MIC = 0.416 mg/mL).</p> <p>12α-Acetal-polygodial: activity against KP (MIC = 0.156 mg/mL), MC and PA (MIC = 0.625 mg/mL each), and SA (MIC = 0.521 mg/mL).</p> <p>Polygodial: activity against KP (MIC = 0.025 mg/mL), no activity against MC; PA, and SA (MIC > 0.25 mg/mL each).</p> <p>Ugandensidial: activity against KP and SA (MIC = 0.130 mg/mL each), MC (MIC = 0.104 mg/mL), and PA (MIC = 0.078 mg/mL).</p> <p>Warburganal: activity against KP (MIC = 0.130 mg/mL), MC (MIC = 0.208 mg/mL), PA (MIC = 0.104 mg/mL), and SA (MIC = 0.156 mg/mL).</p>	[146]
10.		<i>Warburgia ugandensis</i> Sprague	<p>4(13),7-Coloratadien-12,11-olide: activity against MA (MIC = 128 μg/mL), MF (MIC = 128 μg/mL), MS (MIC = 128 μg/mL), and not active against MP</p> <p>Muzigadial: activity against MA (MIC = 32 μg/mL), MF (MIC = 16 μg/mL), MS (MIC = 64 μg/mL), and MP (MIC = 64 μg/mL)</p> <p>Muzigadiolide: activity against MA (MIC = 128 μg/mL), MF (MIC = 128 μg/mL), MS (MIC = 128 μg/mL), and MP (MIC = 64 μg/mL)</p> <p>Linoleic acid: activity against MA (MIC = 4 μg/mL), MF (MIC = 8 μg/mL), MS (MIC = 16 μg/mL), and MP (MIC = 4 μg/mL) (displayed only substances possessing activity against all mycobacteria tested)</p> <p>7α-Acetoxyugandensolide: activity against RS (MIC = 200 μg/mL), no activity against SI. [275]</p> <p>Bemadienolide and Ugandensolide: activity against SI (MIC = 100 μg/mL), no activity against RS.</p> <p>Polygodial, mukaadial and muzigadial: activity against RS (MIC = 25 μg/mL) and SI (MIC = 50 μg/mL).</p> <p>Warburganal: activity against RS and SI (MIC = 50 μg/mL each).</p> <p>Ugandensidial: activity against RS (MIC = 100 μg/mL), and SI (MIC = 25 μg/mL).</p> <p>6α-Hydroxymuzigadial: activity against RS (MIC = 100 μg/mL), no activity against SI.</p> <p>Deacetoxyugandensolide: activity against RS (MIC = 100 μg/mL), and SI (MIC = 200 μg/mL).</p> <p>Drimenin, 9-deoxymuzigadial, cinnamolide, and 3β-acetoxy-cinnamolide: no activity against SI and RS.</p>	[45]
11.	Celastraceae	<i>Elaeodendron buchananii</i> (Loes.) Loes.	<p>3β-Acetoxy-11α, 19α, 28-trihydroxyurs-12-en-23-oic acid: activity against SAL (MIC = 125 μg/mL), no activity against SA, SP, and EC (MIC = 250 μg/mL each), and VC, SD, and NM (MIC > 250 μg/mL each).</p>	[34]

S. No.	Family	Plant name	Bioactivity of compound against tested microorganism	Book or Journal reference
			<p>Elaeodendroside A: activity against SA, SP, and EC (MIC = 125 µg/mL each), no activity against SAL, SD, and NM (MIC = 250 µg/mL each) and VC (MIC > 250 µg/mL).</p> <p>Elaeodendroside B: activity against SP and EC (MIC = 125 µg/mL each), no activity against SA, SAL, VC, SD, and NM (MIC = 250 µg/mL each).</p> <p>Ursolic acid: activity against SA and SAL (MIC = 62.5 µg/mL each), SP and EC (MIC = 125 µg/mL each), no activity against VC (MIC = 250 µg/mL), SD and NM (MIC > 250 µg/mL each).</p> <p>Canophyllol: activity against NM (MIC = 31.25 µg/mL), SA and SAL (MIC = 62.5 µg/mL each), SP, and EC (MIC = 125 µg/mL each), no activity against VC and SD (MIC = 250 µg/mL each).</p> <p>Friedelin: activity against SA and SAL (MIC = 62.5 µg/mL each), SP, EC and NM (MIC = 125 µg/mL each), no activity against VC and SD (MIC > 250 µg/mL each).</p> <p>3β, 11α, 19α-Trihydroxyurs-12-en-23, 28-dioic acid, 3β-acetoxy-19α, 23, 28-trihydroxyurs-12-ene, 3-oxo-19α,28-dihydroxyurs-12-en-24-oic acid, umbiliferone, 3β-hydroxyfriedelin, coumarin, stigmaterol: no activity against SA, SP, SAL, EC, VC, SD, and NM.</p> <p>According to the authors, values of > 125 µg/mL were considered not active.</p>	
12.		<i>Maytenus senegalensis</i> (Lam.) Excell.	Maytenonic acid: activity against BS, EC, and KP (MIC = 98 µg/mL each), and SA (MIC = 195 µg/mL).	[52]
13.		<i>Gymnosporia senegalensis</i> (Lam.) Loes (syn. <i>Maytenus senegalensis</i> (Lam.) Excell.)	(2S)-1-O-(4'Z,7'Z,10'Z-octadecatrienoyl) glycerol and (2R)-methyl [(6'-O-galloyl)-β-D-glucopyranosyloxy]phenylacetate: no growth inhibition of strains SA NBRC13276, BS NBRC 3134, and EC NBRC 3972 at 50 µM.	[42]
14.	Combretaceae	<i>Combretum adenogonium</i> Steud. ex A.Rich. (syn. <i>Combretum fragrans</i> F. Hoffm.)	2,3,8-Trihydroxy-4,6-dimethoxyphenanthrene, 2,3,8-trihydroxy-4,6-dimethoxy-9,10-dihydrophenanthrene, derivative of 2,3,8-trihydroxy-4,6-dimethoxyphenanthrene condensation with methyl acetate, derivative of 2,3,8-trihydroxy-4,6-dimethoxy-9,10-dihydrophenanthrene condensation with methyl propionate: activity against PA (MIC = 0.16 mg/mL each), no activity against EC and SA.	[276]
15.	Compositae	<i>Microglossa pyrifolia</i> (Lam.) Kunze	2-β-D-Glucopyranosyloxy- 1 -hydroxy-trideca-3,5,7,9,11-pentayne: activity against EC (MIC = 388 µg/mL), PA, EF, and SA ATCC 25923 (MIC = 194 µg/mL), and SA –ATCC 29213 (MIC = 97 µg/mL).	[277]
			3-β-D-Glucopyranosyloxy- 1-hydroxy-6(E)-tetradecene-8,10,12-triayne, 2- β-D-glucopyranosyloxy-1-hydroxy-3(E)-tridecene-5,7,9,11-tetraayne, 2- β-D-glucopyranosyloxy-1-hydroxy-5(E)-tridecene-7,9,11-triayne: no activity against EC, PA, EF, and both strains of SA.	

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16.		<i>Solanecio mannii</i> (Hook.f.) C. Jeffrey (syn. <i>Crassocephalum mannii</i> (Hook.f.) Milne-Redh.)	n-Hexacosanol: activity against SA (IZD = 3 mm, MIC = 6.3 µg/mL), SF (IZD = 2 mm, MIC = 12.5 µg/mL), BC (IZD = 2 mm, MIC = 6.3 µg/mL), PA (IZD = 2 mm, MIC = 12.5 µg/mL), SD (IZD = 2 mm, MIC = 12.5 µg/mL), SHF (IZD = 2 mm, MIC = 12.5 µg/mL), no activity against BS, EC, and KP (IZD = 0 mm each). (IZD measurement: 25 µg/disc)	[35]
17.		<i>Vernonia colorata</i> (Willd.) Drake	Vernolide: activity against SA (MIC = 0.5 mg/mL) and BS (MIC = 0.1 mg/mL); no activity against EC and KP (MIC > 8 mg/mL each). 11β,13-Dihydrovermolide: activity against BS (MIC = 4 mg/mL), no activity against SA, EC, and KP (MIC > 8 mg/mL). Vernodaline: activity against SA (MIC = 0.25 mg/mL), BS (MIC = 0.1 mg/mL), EC and KP (MIC = 8 mg/mL each). Vernolide: activity against EC and SA (MIC = 0.3 mg/mL each), and EF (MIC = 0.4 mg/mL).	[278] [279]
18.	Crassulaceae	<i>Bryophyllum pinnatum</i> (Lam.) Oken	Kaempferitrin: activity against SA, PA, and ST (MIC = 32 µg/mL each). Kaempferol 3-O-α-L-(3-acetyl)rhamnopyranoside-7-O-α-L-rhamnopyranoside: activity against SA (MIC = 256 µg/mL), PA (MIC = 128 µg/mL), and ST (MIC = 64 µg/mL). Kaempferol 3-O-α-L-(4-acetyl)rhamnopyranoside-7-O-α-L-rhamnopyranoside: activity against SA (MIC = 64 µg/mL), PA (MIC = 128 µg/mL), and ST (MIC = 32 µg/mL). Kaempferol 3-O-α-D-glucopyranoside-7-O-α-L-rhamnopyranoside: activity against SA and PA (MIC = 4 µg/mL each), and ST (MIC = 1 µg/mL). Afzelin: activity against SA (MIC = 8 µg/mL), PA (MIC = 12 µg/mL), and ST (MIC = 4 µg/mL). α-Rhamnoisorobin: activity against SA (MIC = 2 µg/mL), PA and ST (MIC = 1 µg/mL each).	[53]
			5'-Methyl-4',5,7-trihydroxyflavone (100 mg/mL): activity against SA (IZD = 7 mm, MIC = 12.5 mg/mL), PA (IZD = 8 mm, MIC = 2.5 mg/mL), KP (IZD = 8 mm, MIC = 5 mg/mL), no activity against EC.	[280]
			4',3,5,7-Tetrahydroxy-5-methyl-5'-propenamine anthocyanidine (100 mg/mL): activity against SA (IZD = 10 mm, MIC = 25 mg/mL), EC (IZD = 3 mm, MIC = 100 mg/mL), PA (IZD = 10 mm, MIC = 12.5 mg/mL), KP (IZD = 7 mm, MIC = 50 mg/mL).	
			1-ethanamine 7 Hex-1-yne-5'-one phenanthrene (100 mg/mL): activity against SA (IZD = 7.1 ± 0.01 mm, MIC = 50 mg/mL), EC (IZD = 1.0 ± 0.01 mm, MIC = 100 mg/mL), PA (IZD = 3.2 ± 0.01 mm, MIC = 50 mg/mL), KP (IZD = 2.1 ± 0.01 mm, MIC = 100 mg/mL).	[281]

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			<i>ent-3β-hydroxy-beyer-15-ene-2-one</i> : activity against SA, SHD, and SHF (MIC = 50 µg/mL each), ST, VC, EC, and SHB (MIC = 100 µg/mL each), no activity against SHS (MIC > 200 µg/mL).	
24.	Lamiaceae	<i>Hoslundia opposita</i> Vahl	Euscaphic acid : active gainst MTB H37Rv (MIC = 50 µg/mL).	[285]
25.		<i>Hyptis pectinata</i> (L.) Poit.	Hyptolide : marginal activity against gram positive bacteria (BS: IZD = 5 mm, MIC = 100 µg/mL, no activity against SA, EC and PA) Pectinolide A : activity against BS (IZD = 10 mm, MIC = 6.25 µg/mL), and SA (IZD = 8 mm, MIC = 12.5 µg/mL). Pectinonolide A : activity against SA ATCC 25923 (MIC = 32 µg/mL), SA XU-212, SA SA-1199B and SA MR EMRSA-15 (MIC = 128 µg/mL each). Pectinonolide B : activity against SA ATCC 25923 (MIC = 128 µg/mL), SA XU-212, SA SA-1199B and SA MR EMRSA-15 (MIC = 256 µg/mL each). Pectinonolide C : activity against SA ATCC 25923 (MIC = 64 µg/mL), SA XU-212 (MIC = 256 µg/mL), and SA SA-1199B and SA MR EMRSA-15 (MIC = 128 µg/mL each). Pectinonolide H : activity against SA ATCC 25923 (MIC = 32 µg/mL), SA XU-212, SA SA-1199B and SA MR EMRSA-15 (MIC = 64 µg/mL each).	[193] [286] [287]
26.		<i>Ocimum suave</i> Willd.	Eugenol : activity against EC and ML (MIC = 600 µg/mL each), SA (MIC = 700 µg/mL), and SC (MIC = 400 µg/mL).	[195]
27.	Leguminosae (Fabaceae)	<i>Abrus precatorius</i> L.	Abrequinone B : activity against MTB H37Ra (MIC = 12.5 ± 0.0 µg/mL).	[288]
28.		<i>Acacia mellifera</i> (M. Vahl) Benth.	3-(Z)-cis coumaroylbetulin, botulin (0.1 mg/disc): activity against SA (IZD = 10 mm), PA (IZD = 14 mm), and MG (IZD = 19 mm). 30-Hydroxylup-20 (29)-en-3β-ol (0.1 mg/disc): activity against SA (IZD = 13 mm), PA (IZD = 17 mm), no activity against MG. (20S)-oxolupane-30al : activity against SA (IZD = 10 mm) and MG (IZD = 21 mm). (20R)-oxolupane-30-al : activity against SA (IZD = 10 mm), no activity against MG. Betulinic acid : activity against SA (IZD = 9 mm), no activity against MG.	[289] [290]
29.		<i>Cajanus cajan</i> (L.) Millsp.	Cajanuslactone : activity against SE and BS (MIC = 0.125 mg/mL each), and SA (MIC = 0.031 mg/mL). Pinostrobin : activity against no activity against SE, SA, and BS. Cajainstilbene acid : activity against SE (MIC = 0.013 mg/mL), SA (MIC = 0.025 mg/mL), and BS (MIC = 0.025 mg/mL).	[208]

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30.		<i>Cassia abbreviata</i> Oliv.	Cassinidin A: activity against EC (MIC = 1 µg/mL), BS and SA (MIC = 0.5 µg/mL each). Cassinidin B: activity against EC (MIC = 10 µg/mL), BS and SA (MIC = 5 µg/mL each).	[47]
31.		<i>Cassia singueana</i> Delile	Torosachryson: activity against SA (MIC = 70 µg/mL) Germichryson: activity against CE (MIC = 30 µg/mL) Singueanol-I: activity against SA (MIC = 25 µg/mL) Singueanol-II: activity against SA (MIC = 50 µg/mL)	[291]
32.		<i>Dichrostachys cinerea</i> (L.)	Tannins: activity against SA and PA (MIC = 5.5 mg/mL each), SHB (MIC = 4.5 mg/mL), SHF (MIC = 4.0 mg/mL), and EC (MIC = 5.0 mg/mL).	[292]
33.		<i>Entada abyssinica</i> A. Rich.	Ursolic acid: activity against SA (MIC = 12.5 µg/mL), BC (MIC = 6.25 µg/mL), and STM (MIC = 100 µg/mL), no activity against PA, EF, and EC. Quercitrin: activity against BC (MIC = 12.5 µg/mL), STM (MIC = 3.12 µg/mL), PA and EC (MIC = 50 µg/mL each), and EF (MIC = 25 µg/mL). Quercetin 3-O-β-d-glucosyl (1→4)-α-l-rhamnoside: activity against SA, STM, and EC (MIC = 25 µg/mL each), BC, PA, and EF (MIC = 50 µg/mL). (8S)-Kolaviv acid 15-methyl ester: activity against SA and BC (MIC = 25 µg/mL each), and STM (MIC = 100 µg/mL), no activity against PA, EF, and EC. Methyl gallate: activity against SA, BC and STM (MIC = 50 µg/mL each), no activity against PA, EF, and EC. Entadanin: activity against SA and EC (MIC = 12.5 µg/mL each), BC and PA (MIC = 25 µg/mL each), and STM (MIC = 1.56 µg/mL), no activity against EF. 13,14,15,16-Tetranor-3-clerodene-12,18-dioic acid and Bis-[(S)-(2,3-dihydroxypropyl)] hexacosanedioate: no activity against SA, BC, STM, PA, EF, and EC each. 8S-Kolaviv acid 18-methyl ester: activity against EC, <i>Proteus</i> sp., and SA (IZD = 13 mm at 250 µg each). 8S-Kolaviv acid 15-methyl ester and 8S-kolavenol: no activity against EC, <i>Proteus</i> sp., and SA.	[48]
34.		<i>Erythrina abyssinica</i> DC.	2'methoxy-nor-glycyrrisoflavanone: activity against SA (IZD = 15 mm), no activity against PA. 1,5,4'trihydroxy-5'-prenylchalcone and 2',3',4',7'-tetrahydroxy-5'-prenylflavanone: no activity against SA and PA.	[293]
35.	Loganiaceae	<i>Strychnos spinosa</i> Lam.	Sarracenin: activity against SA, EC, SD, and KP (MIC = 2.5 µg/mL), SP, ST, and PA (MIC = 5 µg/mL).	[49]
36.	Malvaceae	<i>Sida rhombifolia</i> L.	n-Hexacos-11-enoic acid (50 mg/mL): activity against EC (IZD = 13 mm), SA (IZD = 12 mm), PA (IZD = 8 mm), and STM (IZD = 11 mm).	[294]

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			4-(α-l-rhamnopyranosyloxy)benzyl isothiocyanate: activity against BC var. <i>mycoides</i> , BM, BC, MA, ML, and MP (IZD = 10-15 mm each), PM and SF (IZD = 5-10 mm each), EC and SED (IZD = 2-5 mm each), and SM (IZD = 1-2 mm), no activity against KP. [298]	
			4-(α-L-Rhamnosyloxy)benzyl isothiocyanate (10 mg/mL): activity against SA (IZD = 21.13 \pm 1.48 mm), SE (IZD = 19.70 \pm 0.95 mm), BS (IZD = 14.23 \pm 0.84 mm), no activity against EC, EA, KP, and PA. [299]	
			4-(4'-O-Acetyl-α-L-rhamnosyloxy)benzyl isothiocyanate (10 mg/mL): activity against SA (IZD = 23.10 \pm 0.44 mm), SE (IZD = 22.00 \pm 0.50 mm), BS (IZD = 14.50 \pm 1.04 mm), no activity against EC, EA, KP, and PA	
39.	Myrtaceae	<i>Psidium guajava</i> L.	Morin-3-O-α-L-lyxopyranoside activity against SEN (MIC = 200 μ g/mL), and BC (MIC = 250 μ g/mL.) [51] Morin-3-O-α-L-arabopyranoside activity against SE (MIC = 200 μ g/mL), and BC (MIC = 300 μ g/mL).	
			Pentapentacont-17,31-diol: activity against SA (IZD = 9-11 mm), <i>Shigella</i> spp., EC, KP, and BS (IZD = 6.8-8.0 mm each), no activity against STM and PA. [295]	
			11-Hydroxy-tricont-35- pentatriacontanoate: activity against SA (IZD = 12-14 mm) and <i>Shigella</i> spp. (IZD = 6.8-8.0 mm), no activity against STM, EC, KP, PA, and BS.	
			34-Octahexacontanol: activity against SA (IZD = 9-11 mm), EC, KP, and BS (IZD = 6.8-8.0 mm each), no activity against <i>Shigella</i> spp., STM, and PA.	
			Heptatriacont-8-ol: activity against SA (IZD = 9-11 mm), EC and KP (IZD = 6.8-8.0 mm each), no activity against <i>Shigella</i> spp., STM, PA, and BS.	
			14,15-Dimethyl (cyclopropyl)-9-olactadecyl-3-(4-hydroxyphenyl) propanoate: activity against SA (IZD = 9-11 mm), <i>Shigella</i> spp. and PA (IZD = 6.8-8.0 mm each), no activity against STM, EC, KP, and BS.	
			Hexaeicosan-16-ol: activity against SA (IZD = 12-14 mm), <i>Shigella</i> spp., KP, and BS (IZD = 6.8-8.0 mm each), no activity against STM, EC, and PA.	
			Pentatetracosan-10,25-diol: activity against SA (IZD = 12-14 mm), <i>Shigella</i> spp. (IZD = 6.8-8.0 mm each), no activity against STM, EC, KP, PA and BS.	
			Untricontan-11,19-diol: activity against SA (IZD = 9-11 mm), KP (IZD = 6.8-8.0 mm), and no activity against <i>Shigella</i> spp., STM, EC, PA, and BS.	
			Tricosan-17-ene-5-ol: activity against SA (IZD = 12-14 mm), EC and PA (IZD = 6.8-8.0 mm each), no activity against <i>Shigella</i> spp. STM, KP, and BS.	
			Nonacosan-23-ene-3-ol: activity against SA (IZD = 12-14 mm), <i>Shigella</i> spp., STM, EC, and KP (IZD = 6.8-8.0 mm each), no activity against PA and BS.	
40.	Phyllanthaceae	<i>Antidesma venosum</i> E. Mey. ex.Tul.	3R,4R,5S)-4-Hydroxy-5-methyl-3-tetradecanyl γ-lactone: no activity against SA, SP, EF, BC, EC, PA, and SHF. [300]	

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			<p>Friedelin: activity against SA and SP (MIC = 0.1875 mg/mL each), EC and SHF (MIC = 0.375 mg/mL each), PA (MIC = 0.75 mg/mL), .</p> <p>Lupeol: activity against SA and SP (MIC = 1.25 mg/mL each), , no activity against EF, BC, EC, PA, and SHF.</p> <p>β-Sitosterol; no activity against SA, SP, EF, BC, EC, PA, and SHF.</p>	
41.		<i>Margaritaria discoidea</i> (Baill.) G. L. Webster	<p>Hydroxygenkwanin-8-C-[α-rhamnopyranosyl-(1 \rightarrow 6)]-β-glucopyranoside: activity against BS, SA, PV, and PA (MIC= 500 μg/mL each).</p> <p>Genkwanin-6-C-[α-rhamnopyranosyl-(1 \rightarrow 6)]-β-glucopyranoside: activity against BS, SA, PV, and PA (MIC= 500 μg/mL each).</p> <p>Kaempferol-3-O-α-rhamnopyranosyl-(1 \rightarrow 2)-β-glucopyranoside-7-O-α-rhamnopyranoside: activity against PV (MIC= 500 μg/mL), no activity against BS, SA, and PA (MIC > 500 μg/mL).</p> <p>Kaempferol-3-O-α-rhamnopyranosyl-(1 \rightarrow 2)-[α-rhamnopyranosyl-(1 \rightarrow 6)]-β-glucopyranoside-7-O-α-rhamnopyranoside: activity against PV (MIC= 500 μg/mL), no activity against BS, SA, and PA (MIC > 500 μg/mL).</p>	[301]
42.	Polygalaceae	<i>Securidaca longipedunculata</i> Fresen.	<p>(4-Methoxy-benzo[1,3]dioxol-5-yl)-phenylmethanone: activity against PA (IZD = 4 \pm 1.7 mm), no activity against SA and EC.</p> <p>1,7-Dihydroxy-4-methoxyxanthone: activity against SA (IZD = 15.0 \pm 0.7 mm), no activity against EC and PA.</p> <p>Benzyl 2-hydroxy-6-methoxybenzoate and methyl 2-hydroxy-6-methoxybenzoate: no activity against SA, EC, and PA.</p> <p>IZD determination: 10 mg compound/disc</p> <p>3-Hydroxy benzoic acid and 3-hydroxy- 4-methoxy benzoic acid: no activities against BS, SA, EC, and PA.</p> <p>3, 4-Dimethoxy-7-hydroxyxanthone: activity against BS and EC (IZD = 15 mm each), SA and PA (IZD = 11 mm each).</p>	[242]
43.	Rubiaceae	<i>Crossopteryx febrifuga</i> (Afzel. ex G. Don)	<p>Mixture of 18-epi-3β-urs-12,20(30)-diene-27,28-dioic acid and 3β-urs-12,20(30)-diene-27,28-dioic acid (1:3 ratio): activity against EA and EC (MIC = 128 μg/mL each), and KP and SA (MIC = 64 μg/mL each).</p> <p>Mixture of 18-epi-3β-D-glucopyranosyl-urs-12,20(30)-diene-27,28-dioic acid and 3β-D-glucopyranosyl-urs-12,20(30)-diene-27,28-dioic acid (1:3 ratio): activity against EA (MIC = 64 μg/mL), EC and SA (MIC = 32 μg/mL each), and KP (MIC = 8 μg/mL).</p>	[302]
44.		<i>Pavetta crassipes</i> K. Schum.	<p>Quercetin-3-O-rutinoside: activity against EC, PA, and CU (MIC = 6.25 mg/mL each), SP, KP, and NG (MIC = 12.5 mg/mL each).</p> <p>β-Sitosterol: no activity against MTB H37Rv.</p>	[303] [304]

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			<p>Ursolic acid: activity against MTB H37Rv (MIC = 200 µg/mL according to broth microdilution method, 0 µg/mL according to GFPMA).</p> <p>Methyl chlorogenate; activity against MTB H37Rv (MIC = 100 µg/mL according to broth microdilution method, 200 µg/mL according to GFPMA).</p> <p>Ethyl chlorogenate: activity against MTB H37Rv (MIC = 50 µg/mL according to broth microdilution method, 100 µg/mL according to GFPMA).</p> <p>Rutin and mannitol: no activity against MTB H37Rv.</p>	
45.		<i>Rubia cordifolia</i> L.	<p>Rubiaceordone A (20 µg / disc): activity against SA (IZD = 13 ± 0.3 mm), BS (IZD = 26 ± 0.3 mm), SE (IZD = 14 ± 0.4 mm), SF (IZD = 29 ± 0.2 mm), BC (IZD = 24 ± 0.6 mm), VP (IZD = 8 ± 0.5 mm), PA (IZD = 9 ± 0.5 mm), STM (IZD = 12 ± 0.2 mm), and EC (IZD = 10 ± 0.4 mm).</p> <p>1-Acetoxy-6-hydroxy-2-methylanthraquinone-3-O-[α-L-rhamnopyranosyl-(1→2)-β-D-glucopyranoside] (20 µg / disc): activity against SA (IZD = 19 ± 0.6 mm), BS (IZD = 27 ± 0.3 mm), SE (IZD = 11 ± 0.5 mm), SF (IZD = 22 ± 0.5 mm), BC (IZD = 26 ± 0.5 mm), VP (IZD = 11 ± 0.3 mm), PA (IZD = 8 ± 0.6 mm), STM (IZD = 8 ± 0.3 mm), and EC (IZD = 11 ± 0.5 mm).</p>	[41]
46.	Rutaceae	<i>Harrisonia abyssinica</i> Oliv	<p>Harronin I (5-(ethan-1''-one)-4,6-dihydroxy-7-(3'',3''-dimethylallyl)-2S-(1'S-hydroxy-1',5'-dimethylhex-4'-enyl)-2,3-dihydrobenzofuran): activity against BC (IZD = 14 ± 1 mm), EC (IZD = 13 ± 2 mm), STM, SA, and LC (IZD = 12 ± 1 mm each).</p> <p>Harronin II (5-(2'''-hydroxyethan-1'''-one)-4,6-dihydroxy-7-(3'',3''-dimethylallyl)-2S-(1'S-hydroxy-1',5'-dimethylhex-4'-enyl)-2,3-dihydrobenzofuran): activity against BC (IZD = 10 ± 2 mm), EC (IZD = 11 ± 1 mm), STM (IZD = 9 ± 1 mm), SA (IZD = 8 ± 1 mm), and LC (IZD = 10 ± 1 mm).</p>	[256]
47.		<i>Toddalia asiatica</i> (L.) Lam.	<p>Flindersine: activity against BS and EF (MIC = 31.25 µg/mL each), SA and SE (MIC = 62.5 µg/mL), PA (MIC = 250 µg/mL), no activity against EC, KP, PV and EAM.</p> <p>Ulopterol: activity against BS (MIC = 250 µg/mL), SPT, PA, STM, ML, and SA (MIC = 125 µg/mL each), SHF and EA (MIC = 62.5 µg/mL), and SE (MIC = 15.625 µg/mL).</p> <p>Chelerythrine (IZD at 52 µg/disc): activity against SA (IZD = 19.07 ± 0.19 mm, MIC = 0.156 mg/mL), SA MR (IZD = 18.12 ± 0.14 mm, MIC = 0.156 mg/mL), SA ESBLs (IZD = 16.93 ± 0.23 mm, MIC = 0.156 mg/mL).</p> <p>Nelumol A: activity against MTB H37Ra (MIC = 50 µg/mL).</p> <p>8-Geranyloxy-5,7-dimethyloxycoumarin: activity against MTB H37Ra (MIC = 50 µg/mL).</p> <p>Norchelerythrine: activity against MTB H37Ra (MIC = 25 µg/mL).</p> <p>8-(3',7'-Dimethyl-7'-hydroxy-2'E,5'E-octadienyl)oxy-5,7-dimethoxycoumarin, 8-(3',7'-dimethyl-7'-hydroxy-2'E,5'Z-octadienyl)oxy-5,7-dimethoxycoumarin, 6-(3'-methyl-1',3'-butadienyl)-5,7-dimethoxycoumarin, 4-O-geranylco-niferyl aldehyde, phellopterin, 5-methoxy-8-geranyloxylopsoralen, artanin, 5,7,8-trime-</p>	[261] [305] [258] [306]

S. No.	Family	Plant name	Bioactivity of compound against tested microorganism	Book or Journal reference
			<p>thoxycoumarin, leptodactylone, toddalolactone, toddalolactone methyl ether, 1,2-seco-dihydromethylumbelliferone methyl ester and toddalosin: no activity against MTB H37Ra.</p> <p>1-Dimethyl dicentrinone and dicentrinone: activity against SA (IZD = 8-24 mm, MIC = 0.39-1.23 mg/mL) and SE (IZD = 8-23 mm, MIC = 0.12-1.31 mg/mL), no activity against EC, EBC, KP, PA, SD, SM, and SV. [307]</p> <p>11-Hydroxy-10-methoxy-(2,3)-methylenedioxytetrahydroprotoberberine: activity against EC (IZD = 8 mm), SA (IZD = 8-24 mm, MIC = 0.39-1.23 mg/mL), SE (IZD = 8-23 mm, MIC = 0.12-1.31 mg/mL), KP and SD (IZD = 7 mm each), no activity against EBC, PA, SM, and SV.</p> <p>(2,3,10,11)-Dimethylenedioxytetrahydroprotoberberine: activity against EC and KP (IZD = 7 mm each), SA (IZD = 8-24 mm, MIC = 0.39-1.23 mg/mL), SE (IZD = 8-23 mm, MIC = 0.12-1.31 mg/mL), SD (IZD = 8 mm), no activity against EBC, PA, SM, and SV.</p> <p>8-Methoxynorchelerythrin, 1-demethylrhoifoline, 8-methoxynitidine, 8-acetylnorchelerythrine, 8,9,10,12-tetramethoxynorchelerythrin, isointegriamide, rhoifoline B, pancorine, 8-methoxychelerythrine, arnottianamide, oxynitidine, oxysanguinarine, skimmianine and 5-methoxydictamnine: activity against SA (IZD = 8-24 mm, MIC = 0.39-1.23 mg/mL), SE (IZD = 8-23 mm, MIC = 0.12-1.31 mg/mL), EC (IZD = 10-24 mm), EBC (IZD = 9-23 mm), KP (IZD = 8-23 mm), PA (IZD = 7-24 mm), SD (IZD = 8-24 mm), SM (IZD = 9-24 mm), SV (IZD = 7-23 mm).</p> <p>The most active substance was 8-acetylnorchelerythrine giving the largest zones of inhibition in all cases.</p>	
48.	Verbenaceae	<i>Lantana camara</i> L.	<p>Acetyl linaroside: activity against MTB H37Rv (MIC > 6.25 µg/mL). [308]</p> <p>Linaroside and lantanoside: no activity against MTB H37Rv.</p>	
49.	Xanthorrhoeaceae	<i>Aloe secundiflora</i> Engl.	<p>5-hydroxy-3,6-dimethoxy-2-methylnaphthalene-1,4-dione: activity against MTB H37Rv (MIC = 23.5 µg/mL) determined by the Microplate Alamar Blue Assay (MABA) and MIC = 23.1 µg/mL determined by the Low Oxygen Recovery Assay (LORA). [309]</p> <p>Aloesaponarin I: activity against MTB H37Rv (MIC = 22.8 µg/mL (MABA) and MIC = 21.1 µg/mL (LORA)).</p> <p>Aloesaponarin II, aloe-emodin and laccaic acid D methyl ester: no activity against MTB H37Rv.</p>	

BC = *Bacillus cereus*, BM = *Bacillus megaterium*, BP = *Bacillus pumilus*, BS = *Bacillus subtilis*, CBD = *Corynebacterium diphtheria*, CBF = *Corynebacterium fasciens*, CBP = *Corynebacterium poinsettiae*, CE = *Corynebacterium equi*, CU = *Corynebacterium ulcerans*, EAM = *Erwinia amylovora*, EBC = *Enterobacter cloacae*, EC = *Escherichia coli*, ECA = *Erwinia carotovora*, ECF = *Enterococcus faecium*, EF = *Enterococcus faecalis*, KP = *Klebsiella pneumoniae*, LC = *Lactobacillus casei*, MA = *Mycobacterium aurum*, MBM = *Mycobacterium marinum*, MC = *Moraxella catarrhalis*, MF = *Mycobacterium fortuitum*, MG = *Microsporium gypseum*, ML = *Micrococcus luteus*, MP = *Mycobacterium phlei*, MS = *Mycobacterium smegmatis*, MTB = *Mycobacterium tuberculosis*, NG = *Neisseria gonorrhoeae*, NM = *Neisseria meningitidis*, PA = *Pseudomonas aeruginosa*, PM = *Proteus mirabilis*, PV = *Proteus vulgaris*, RS = *Ralstonia solanacearum*, SA = *Staphylococcus aureus*, SA MR = Methicillin resistant *Staphylococcus aureus*, SAG = *Streptococcus agalactiae*, SAL = *Staphylococcus albus*, SCS = *Staphylococcus saprophyticus*, SC = *Staphylococcus citreus*, SD = *Shigella dysenteriae*, SEN = *Salmonella enteritidis*, SE = *Staphylococcus epidermidis*, SED = *Salmonella edinburg*, SF =

Streptococcus faecalis, SHB = *Shigella boydii*, SHF = *Shigella flexneri*, SHS = *Shigella sonnei*, SI = *Streptomyces ipomoeae*, SLA = *Salmonella agona*, SLV = *Salmonella virchow*, SM = *Streptococcus mutans*, SP = *Streptococcus pyogenes*, SPN = *Streptococcus pneumoniae*, SPT = *Salmonella paratyphi*, SRM = *Serratia marcescens*, SSC = *Staphylococcus sciuri*, ST = *Salmonella typhi*, STM = *Salmonella typhimurium*, SV = *Streptococcus viridans*, SX = *Staphylococcus xylosum*, VC = *Vibrio cholera*, VP = *Vibrio parahaemolyticus*

MIC = minimum inhibitory concentration, IZD = inhibition zone diameter

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