

**Table S1.** Antimicrobial compounds produced by *Burkholderia sensu stricto*.

Compound (s) number(s)	Compounds	Producing species	Target organisms	Other asignation	Activity value (MIC, IC50, volume, amount, hemolytic units, µg/mL per agar well or per disc, etc.)	Mode of action	Reference
<b>N-CONTAINING HETEROCYCLES</b>							
<b>Pyrazine-derived</b>							
1	PPDH					Cell wall/membrane/envelope biogenesis, signal transduction mechanisms, inorganic ion transport and metabolism, secondary metabolites biosynthesis, transport and catabolism, post-translational modification, protein turnover and amino acid transport and metabolism	
2	PPDHMP	<i>Burkholderia seminalis</i> JRBHU6	<i>Fusarium oxysporum</i> , <i>Aspergillus niger</i> , <i>Microsporium gypseum</i> , <i>Trichophyton mentaphyites</i> , <i>Trichoderma harzianum</i> and the bacteria <i>Staphylococcus aureus</i> , <i>Pseudomonas aeruginosa</i> , <i>Escherichia coli</i> , <i>Shigella boydii</i> , <i>Klebsiella pneumoniae</i>	VOC	MIC: 50 µg/ml of crude methanolic extract		[21]
<b>Iminomyrrolidines</b>							
3	v-pyrrolidine	<i>Burkholderia plantarii</i>			1 µg		
4	t-pyrrolidine	9424	<i>Erwinia amylovora</i>		1 µg		[23]
5	Pyrazole	<i>Burkholderia glumae</i> 3729, 8657	<i>Erwinia amylovora</i> , <i>Pectobacterium carotovorum</i> , <i>Pectobacterium carotovorum</i> pv atroseptica, <i>Pseudomonas syringae</i> pv carotovorum, <i>Pseudomonas syringae</i> syringae, <i>Xanthomonas campestris</i> pv pruni		1 µg		[24]
6	Pyrrolnitrin	<i>Burkholderia pyrrocinia</i> , <i>Burkholderia cepacia</i> , <i>Burkholderia ambifaria</i>	<i>Penicillium</i> , <i>Phytophthora capsici</i> , <i>Fusarium oxysporum</i> , <i>Rhizoctonia solani</i> , <i>Colletotrichum gloeosporioides</i> , <i>Sclerotinia sclerotiorum</i> , <i>Candida albicans</i> , <i>Hansenula anomala</i> , <i>Saccharomyces cerevisiae</i> , <i>Bacillus</i> , <i>Streptomyces</i>	Halometabolite	MIC: 2-200 µg.mL <sup>-1</sup> / 30-250 µg/disc	Inhibitory effect on the electron transport system.	[28,29,30,31]
7	Phenazine	<i>Burkholderia cepacia</i> 5.5B	<i>Rhizoctonia solani</i>	Involved in biofilm formation by Bcc	10 mg		[33,34]
8	Phencomycin		<i>Botrytis cinerea</i> , <i>Colletotrichum orbiculare</i> , <i>Diaporthe citri</i> , <i>Magnaporthe oryzae</i> , <i>Saccharomyces cerevisiae</i> , <i>Bacillus megaterium</i> , <i>Micrococcus luteus</i> , <i>Xanthomonas campestris</i>	Phenazin with two substituents	MIC: 32-128 µg.mL <sup>-1</sup>		
9	Hydroxyphencomycin		<i>Bacillus megaterium</i>	Phencomycin derivative	MIC: 128 µg.mL <sup>-1</sup>		
10	Dihydroxyphencomycin	<i>Burkholderia glumae</i> 411gr-6	<i>Alternaria brassicicola</i> , <i>Aspergillus oryzae</i> , <i>Botrytis cinerea</i> , <i>Cladosporium cucumerinum</i> , <i>Colletotrichum gloeosporioides</i> , <i>Colletotrichum orbiculare</i> , <i>Cylindrocarpon destructans</i> , <i>Diaporthe citri</i> , <i>Fusarium oxysporum</i> , <i>Magnaporthe oryzae</i> , <i>Phytophthora capsici</i> , <i>Rhizopus stolonifer</i> , <i>Sclerotinia sclerotiorum</i> , <i>Candida albicans</i> , <i>Saccharomyces cerevisiae</i> , <i>Escherichia coli</i> , <i>Pseudomonas syringae</i> , <i>Ralstonia solanacearum</i> , <i>Xanthomonas campestris</i>	Phencomycin derivate	MIC: 1-128 µg.mL <sup>-1</sup>		[35]
11	PCA	<i>Burkholderia</i> sp. HQB-1	<i>Fusarium oxysporum</i> , <i>Colletotrichum gloeosporioides</i> , <i>Botrytis cinerea</i> , <i>Curvularia fallax</i>	Phenazine derivate	MIC: 1.56-6.12 µg.mL <sup>-1</sup>		[36]
12	Indole	<i>Burkholderia cenocepacia</i> ETR-B22	<i>Alternaria alternata</i> , <i>Aspergillus niger</i> , <i>Bipolaris sorokiniana</i> , <i>Botrytis cinerea</i> , <i>Fusarium solani</i> , <i>F. oxysporum</i> , <i>Fusarium fujikuroi</i> , <i>Helminthosporium torulosum</i> , <i>Mycosphaerella fijensis</i> , <i>Magnaporthe oryzae</i> , <i>Phyllosticta zingiberi</i> , <i>R. solani</i>	VOC	50 µL/petri dish	Inhibition of mycelial growth	[37]
13	Pityriacitrin	<i>Burkholderia</i> sp. NBF227	Cytotoxic activity against cancer lines	β-carboline alkaloid	IC <sub>50</sub> : 75.79 µM	Cytotoxic activity against cancer lines	[38]

14	Pityriacitrin B	<i>Burkholderia</i> sp. NBF227	Cytotoxic activity against cancer lines	$\beta$ -carboline alkaloid	IC <sub>50</sub> : 41.88-67.69 $\mu$ M	Cytotoxic activity against cancer lines	[38]
<b>VOLATILE ORGANIC COMPOUNDS</b>							
15	Methyl anthranilate		<i>Alternaria alternata</i> , <i>Aspergillus niger</i> , <i>Bipolaris sorokiniana</i> , <i>Botrytis cinerea</i> , <i>Fusarium solani</i> , <i>Fusarium oxysporum</i> , <i>Fusarium fujikuroi</i> , <i>Helminthosporium torulosum</i> , <i>Mycosphaerella fijiensis</i> , <i>Magnaporthe oryzae</i> , <i>Phyllosticta zingiberi</i> , <i>Ralstonia solani</i>				
16	Methyl salicylate		<i>Alternaria alternata</i> , <i>Aspergillus niger</i> , <i>Bipolaris sorokiniana</i> , <i>Botrytis cinerea</i> , <i>Fusarium fujikuroi</i> , <i>Helminthosporium torulosum</i> , <i>Mycosphaerella fijiensis</i> , <i>Magnaporthe oryzae</i> , <i>Phyllosticta zingiberi</i> , <i>Rhizoctonia solani</i>				
17	Methyl benzoate		<i>Aspergillus niger</i> , <i>Rhizoctonia solani</i>				
18	Benzyl propionate		<i>Alternaria alternata</i> , <i>Aspergillus niger</i> , <i>Bipolaris sorokiniana</i> , <i>Botrytis cinerea</i> , <i>Fusarium solani</i> , <i>Fusarium oxysporum</i> , <i>Fusarium fujikuroi</i> , <i>Helminthosporium torulosum</i> , <i>Mycosphaerella fijiensis</i> , <i>Magnaporthe oryzae</i> , <i>Phyllosticta zingiberi</i> , <i>Ralstonia solani</i>				
19	Benzyl acetate		<i>Alternaria alternata</i> , <i>Aspergillus niger</i> , <i>Bipolaris sorokiniana</i> , <i>Botrytis cinerea</i> , <i>Fusarium solani</i> , <i>Fusarium oxysporum</i> , <i>Fusarium fujikuroi</i> , <i>Helminthosporium torulosum</i> , <i>Mycosphaerella fijiensis</i> , <i>Magnaporthe oryzae</i> , <i>Phyllosticta zingiberi</i> , <i>Ralstonia solani</i>				
20	3,5-Di- <i>tert</i> -butylphenol		<i>Alternaria alternata</i> , <i>Aspergillus niger</i> , <i>Bipolaris sorokiniana</i> , <i>Botrytis cinerea</i> , <i>Fusarium solani</i> , <i>Fusarium oxysporum</i> , <i>Fusarium fujikuroi</i> , <i>Helminthosporium torulosum</i> , <i>Mycosphaerella fijiensis</i> , <i>Magnaporthe oryzae</i> , <i>Phyllosticta zingiberi</i> , <i>Ralstonia solani</i>				
21	Allyl benzyl ether		<i>Aspergillus niger</i> , <i>Rhizoctonia solani</i>				
22	Benzyl benzoate	<i>Burkholderia cenocepacia</i> ETR-B22	<i>Aspergillus niger</i> , <i>Rhizoctonia solani</i>		50 $\mu$ L/petri dish	Inhibition of mycelial growth	[37]
23	Dimethyl trisulfide		<i>Alternaria alternata</i> , <i>Aspergillus niger</i> , <i>Bipolaris sorokiniana</i> , <i>Botrytis cinerea</i> , <i>Fusarium solani</i> , <i>Fusarium oxysporum</i> , <i>Fusarium fujikuroi</i> , <i>Helminthosporium torulosum</i> , <i>Mycosphaerella fijiensis</i> , <i>Magnaporthe oryzae</i> , <i>Phyllosticta zingiberi</i> , <i>Ralstonia solani</i>				
24	Nonanoic acid		<i>Alternaria alternata</i> , <i>Aspergillus niger</i> , <i>Bipolaris sorokiniana</i> , <i>Botrytis cinerea</i> , <i>Fusarium solani</i> , <i>Fusarium oxysporum</i> , <i>Fusarium fujikuroi</i> , <i>Helminthosporium torulosum</i> , <i>Mycosphaerella fijiensis</i> , <i>Magnaporthe oryzae</i> , <i>Phyllosticta zingiberi</i> , <i>Ralstonia solani</i>				
25	2-pentadecanone		<i>Bipolaris sorokiniana</i> , <i>Rhizoctonia solani</i>				
26	3-hexen-1-ol, benzoate, (Z)-		<i>Alternaria alternata</i> , <i>Botrytis cinerea</i> , <i>Magnaporthe oryzae</i>				
27	Dimethyl disulfide	<i>Burkholderia gladioli</i> BBB-01	<i>Magnaporthe oryzae</i> , <i>Gibberella fujikuroi</i> , <i>Sarocladium oryzae</i> , <i>Phellinus noxius</i> and <i>Colletotrichum fructicola</i> , <i>Candida albicans</i>		1-100 $\mu$ L		[40]
28	2,5-dimethylfuran						
<b>POLYENES</b>							
	Polyene	<i>Burkholderia cenocepacia</i> P525	<i>Enterobacter soli</i> , <i>Enterobacter aerogenes</i>	Oxidizer	50 $\mu$ L	Bacteriostatic effect by extending the lag phase of growth	[41]
29	Thailandamide A		<i>Bacillus subtilis</i> , <i>Staphylococcus aureus</i> , <i>Neisseria gonorrhoeae</i> , <i>Escherichia coli</i> , <i>Vibrio parahaemolyticus</i> , <i>Klebsiella pneumoniae</i> , <i>Acinetobacter baumannii</i> , <i>Saccharomyces cerevisiae</i>		MIC: 1-50 $\mu$ M	Inhibition of the first step of fatty acid biosynthesis by targeting acetyl-CoA carboxylase (AccA)	[42]
30	Thailandenes A	<i>Burkholderia thailandensis</i> DW503	<i>Staphylococcus aureus</i> , <i>Bacillus subtilis</i> , <i>Saccharomyces cerevisiae</i>		IC <sub>50</sub> : 7.9-10.8 $\mu$ M	Induces oxidative stress in sensitive cells, and formation of reactive oxygen species*	[43]
31	Thailandenes B		<i>Staphylococcus aureus</i> , <i>Saccharomyces cerevisiae</i>		IC <sub>50</sub> 4-9 $\mu$ M		
32	Thailandenes C						
33, 34	Enacyloxin IIa, iso-enacyloxina IIa	<i>Burkholderia ambifaria</i> AMMD <sup>T</sup> , <i>Burkholderia gladioli</i> pv. <i>cocovenensis</i> ATCC 33664 <sup>T</sup> , <i>Burkholderia gladioli</i> pv. <i>cocovenensis</i> ATCC 33664 <sup>T</sup>	<i>Burkholderia multivorans</i> , <i>Burkholderia dolosa</i> , <i>Acinetobacter baumannii</i>	PK	MIC: 3-15 mg.L <sup>-1</sup>	Inhibit protein biosynthesis by binding to ribosomal elongation factor Tu	[44]
35	Enacyloxin IIIa		<i>Escherichia coli</i> , <i>Pseudomonas aeruginosa</i>		50 $\mu$ g.mL <sup>-1</sup>		[46]
<b>POLYINES</b>							
36	Cepacin A	<i>Burkholderia cepacia</i> SC 11,783, <i>Burkholderia ambifaria</i> J82/BCC01 91, <i>Burkholderia ambifaria</i> M54/BCC0 316	<i>Staphylococcus aureus</i> , <i>Micrococcus luteus</i> , <i>Escherichia coli</i> , <i>Proteus vulgaris</i> , <i>Salmonella typhosa</i> , <i>Pythium ultimum</i>	Acetylenic antibiotic	MIC: 0.1-25 $\mu$ g.mL <sup>-1</sup>	Inhibition of protein synthesis by binding to the 50S ribosomal subunit	[47,48]
37	Cepacin B	<i>Burkholderia cepacia</i> SC 11,783	<i>Staphylococcus aureus</i> , <i>Microbacterium luteus</i> , <i>Escherichia coli</i> , <i>Klebsiella aerogenes</i> , <i>Proteus mirabilis</i> , <i>Proteus rettgeri</i> , <i>Proteus vulgaris</i> , <i>Salmonella typhi</i> , <i>Shigella sonnei</i> , <i>Enterobacter cloacae</i> , <i>Enterobacter aerogenes</i> , <i>Citrobacter freundii</i>		MIC: 0.05-25 $\mu$ g.mL <sup>-1</sup>		[47]
38	Caryoynein A	<i>Burkholderia</i> sp.	<i>Staphylococcus aureus</i> , <i>Bacillus subtilis</i> , <i>Enterococcus faecalis</i> , <i>Escherichia coli</i>	Fatty acid-derived	MIC: 0.02-25 $\mu$ g.mL <sup>-1</sup>		[50,51]

		<i>caryophylli</i> , <i>Burkholderia</i> <i>a gladioli</i> Lv-StA	<i>Salmonella enteritidis</i> , <i>Klebsiella pneumoniae</i> , <i>Serratia marcescens</i> , <i>Proteus vulgaris</i> , <i>Shigella flexneri</i> , <i>Enterobacter cloacae</i> , <i>Pseudomonas aeruginosa</i> , <i>Tricophyton mentagrophytes</i> , <i>Tricophyton interdigitale</i> , <i>Tricophyton rubrum</i> , <i>Purpureocillium lilacinum</i>				
39	Caryocine B	<i>Burkholderia</i> <i>a caryophylli</i>	<i>Staphylococcus aureus</i> , <i>Bacillus subtilis</i> , <i>Enterococcus faecalis</i> , <i>Escherichia coli</i> , <i>Salmonella enteritidis</i> , <i>Klebsiella pneumoniae</i> , <i>Serratia marcescens</i> , <i>Proteus vulgaris</i> , <i>Shigella flexneri</i> , <i>Enterobacter cloacae</i> , <i>Pseudomonas aeruginosa</i> , <i>Tricophyton mentagrophytes</i> , <i>Tricophyton interdigitale</i> , <i>Tricophyton rubrum</i>			MIC: 0.02-0.63 µg.mL <sup>-1</sup>	
40	Caryocine C	<i>Burkholderia</i> <i>a caryophylli</i>	<i>Staphylococcus aureus</i> , <i>Bacillus subtilis</i> , <i>Enterococcus faecalis</i> , <i>Escherichia coli</i> , <i>Salmonella enteritidis</i> , <i>Klebsiella pneumoniae</i> , <i>Serratia marcescens</i> , <i>Proteus vulgaris</i> , <i>Shigella flexneri</i> , <i>Enterobacter cloacae</i> , <i>Pseudomonas aeruginosa</i> , <i>Tricophyton mentagrophytes</i> , <i>Tricophyton interdigitale</i> , <i>Tricophyton rubrum</i>				
<b>SIDEROPHORES</b>							
41	Pyochelin	" <i>Burkholderia paludis</i> ", <i>Burkholderia</i> <i>a seminalis</i> TC3.4.2R3	<i>Enterococcus faecalis</i> , <i>Staphylococcus aureus</i> , <i>Fusarium oxysporum</i>	NRP		MIC: 3.13-6.26 µg.mL <sup>-1</sup>	Production of intracellular reactive oxygen species leading to disrupt bacterial membrane [57,59]
42	Cepabactin	<i>Burkholderia</i> <i>a cepacia</i> ATCC 25416 <sup>T</sup>	<i>Staphylococcus aureus</i> , <i>Staphylococcus epidermidis</i> , <i>Streptococcus faecalis</i> , <i>Bacillus subtilis</i> , <i>Bacillus anthracis</i> , <i>Escherichia coli</i> , <i>Salmonella Typhi</i> , <i>Salmonella Typhimurium</i> , <i>Klebsiella pneumoniae</i> , <i>Proteus vulgaris</i> , <i>Proteus mirabilis</i> , <i>Proteus rettgeri</i>			MIC: 1.56-50 µg.mL <sup>-1</sup>	[60,61,62]
43	Ornibactin	<i>Burkholderia</i> <i>a contaminans</i> MS14	<i>Xanthomonas citri</i> pv. <i>malvacearum</i> , <i>Pectobacterium carotovorum</i> subsp. <i>carotovorum</i> , <i>Ralstonia solanacearum</i> , <i>Pseudomonas syringae</i> pv. <i>syringae</i> , <i>Erwinia amylovora</i> , <i>Escherichia coli</i> , <i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i> , <i>Bacillus megaterium</i>	NRP		ND	Promotes iron uptake in iron-deficient cells/protect the cells from metal toxicity and thus play an alternative role in metal homeostasis [65,151]
<b>MACROLIDES</b>							
44	Gladiolin	<i>Burkholderia</i> <i>a gladioli</i> BCC0238	<i>Mycobacterium tuberculosis</i> , <i>Klebsiella pneumoniae</i> , <i>Acinetobacter baumannii</i> , <i>Pseudomonas aeruginosa</i> , <i>Enterobacter cloacae</i> , <i>Serratia plymuthica</i> , <i>Ralstonia mannitolilytica</i> , <i>Burkholderia multivorans</i> , <i>Escherichia coli</i> , <i>Enterococcus faecium</i> , <i>Staphylococcus aureus</i> , <i>Bacillus subtilis</i> , <i>Candida albicans</i>	PK		MIC: 4-64 µg.mL <sup>-1</sup>	Inhibition of RNA polymerase [68]
45	Lagriene	<i>Burkholderia</i> <i>a gladioli</i> Lv-StA	<i>Bacillus thuringiensis</i> , <i>Mycobacterium vaccae</i> , <i>Enterococcus faecalis</i> , <i>Staphylococcus aureus</i>	PK		50 µg	Inhibition of RNA polymerase [51]
<b>BACTERIO CINS</b>							
	Tailocin (BceTMilo)	<i>Burkholderia</i> <i>a cenocepacia</i> BC0425	Bcc strains, <i>Burkholderia gladioli</i> , <i>Burkholderia glumae</i>			Killing units: 3.86-12.30	Inject ions through the cell membrane and disrupt the proton motive force. Interferes with the integration and folding of outer membrane proteins by recognition of BamA receptors [72,73]
	Lectin-like (LipA)	<i>Burkholderia</i> <i>a orbicula</i> TAil-371 <sup>T</sup> , AU1054	<i>Burkholderia ambifaria</i> , <i>Burkholderia anthina</i> , <i>Burkholderia cenocepacia</i> , <i>Burkholderia contaminans</i> , <i>Burkholderia metallica</i>			10 µg	Inhibition of RNA polymerase [66,73]
	Burkhocins M1 and M2	<i>Burkholderia</i> <i>a ambifaria</i> MEX-5, AMMD <sup>T</sup>	Bcc strains			20 µM	Degradation of cell wall precursor lipid II in target cells [74]
	Bacteriocin-like inhibitory substance (BLIS)	<i>Burkholderia</i> <i>a ubonensis</i> A21	<i>Burkholderia pseudomallei</i>	RiPP		ND	[75]
	Capistruin (lasso peptide)	<i>Burkholderia</i> <i>a thailandensis</i> E264	<i>Paraburkholderia caledonica</i> , <i>Escherichia coli</i> , <i>Pseudomonas aeruginosa</i>			5 nM	Inhibition of RNA polymerase [76,78]
	Ubonodin (lasso peptide)	<i>Burkholderia</i> <i>a ubonensis</i> MSMB220 7	<i>Burkholderia cepacia</i> , <i>Burkholderia multivorans</i> , <i>Escherichia coli</i>			MIC: 3.9-40 µM	Inhibition of RNA polymerase [79]
<b>QUINOLONES</b>							
46	HMNQ	<i>Burkholderia</i> <i>a thailandensis</i> E264	<i>Bacillus subtilis</i> , <i>Escherichia coli</i>	Alkylquinolone		IC <sub>50</sub> : 0.3-1.1 µM	Inhibition of pyrimidine biosynthesis. Inhibits the cytochrome <i>bc<sub>1</sub></i> complex of the electron transport chain of oxidative phosphorylation [82]
47	HQNO	<i>Burkholderia</i> <i>a thailandensis</i> E264	<i>Bacillus subtilis</i> , <i>Escherichia coli</i>	Alkylquinolone		IC <sub>50</sub> : 4.1-9.1 µM	[82]

48	C7Δ2	<i>Burkholderia cepacia</i> RB425, <i>Burkholderia cepacia</i> PC-II	<i>Verticillium dahlia</i> , <i>Pyricularia oryzae</i> , <i>Cochliobolus myyabeanus</i> , <i>Rhizoctonia solani</i> , <i>Fusarium oxysporum</i> , <i>Gaeumannomyces graminis</i> , <i>Corynebacterium michiganense</i> and oomycetes <i>P. capsici</i> , <i>Pythium ultimum</i> , <i>Fusarium oxysporum</i> , <i>Rhizoctonia solani</i>	Alkylquinolone	0.1-10 <sup>1</sup> µg.mL <sup>-1</sup>	Inhibition of pyrimidine biosynthesis	[84,85]
49	Burkholone	<i>Burkholderia</i> sp. QN15488	Induces cell death in 32D/GR15 cells in IGF-I containing medium	Quinolone derivative	IC <sub>50</sub> : 160 nM		[86]
OTHER NPR-PK COMPOUNDS							
50	Gladiostatin	<i>Burkholderia gladioli</i> BCC0238, BCC1622	<i>Saccharomyces cerevisiae</i> ; cancer cell lines such as ovarian, pancreatic and colon cancer, inhibits tumor cell migration	PK	<i>S. cerevisiae</i> MIC: 4 µg.mL <sup>-1</sup> ; cancer cell lines IC <sub>50</sub> : 0.24-1.4 µM	Inhibit eukaryotic translation by blocking the binding of tRNA to the E-site of the 60S ribosomal subunit and inhibit tumour cell-migration	[89]
50	Gladiofungin A	<i>Burkholderia gladioli</i> HK10739	<i>Penicillium notatum</i> , <i>Sprobolomyces salmonicolor</i> , <i>Purpureocillium lilacinum</i>	PK	1-1000 µg.mL <sup>-1</sup>	Inhibit eukaryotic translation by blocking the binding of tRNA to the E-site of the 60S ribosomal subunit and inhibit tumour cell-migration*	[88]
51	Glidobactin A	<i>Burkholderia pseudomallei</i> , <i>Burkholderia mallei</i>			MIC: 1.6-50 µg.mL <sup>-1</sup>		[90]
52	Glidobactin B	<i>Schlegelleana brevitalea</i> K481-B101 (member of <i>Burkholderia</i> ales)	<i>Candida albicans</i> , <i>Cryptococcus neoformans</i> , <i>Aspergillus fumigatus</i> , <i>Aspergillus flavus</i> , <i>Trichophyton mentagrophytes</i> , <i>Blastomyces dermatitidis</i> , <i>Mucor spinosus</i>		MIC: 0.8-50 µgmL <sup>-1</sup>	Inhibition of protein biosynthesis	[90]
53	Glidobactin C	<i>Burkholderia pseudomallei</i>		NRP-PK	MIC: 0.2-50 µg.mL <sup>-1</sup>		[90,95]
54	Cepafungin I	<i>Burkholderia cepacia</i> CB-3				Prolongs the survival period of mice implanted with P388 murine lymphoid leukemia cells. However, the mechanism of action as an antifungal agents remains to be determined	[92]
54	Cepafungin II	<i>Burkholderia cepacia</i> CB-3, <i>Burkholderia pseudomallei</i> , <i>Burkholderia mallei</i>	<i>Candida albicans</i> , <i>Candida krusei</i> , <i>Aspergillus fumigatus</i> , <i>Microsporum canis</i> , <i>Trichophyton mentagrophytes</i>		MIC: 1.6-12.5 µg.mL <sup>-1</sup>		[92,93,94]
55	Cepafungin III	<i>Burkholderia cepacia</i> CB-3					[92]
56, 57, 58, 59	Occidiofungin	<i>Burkholderia contaminans</i> MS14	<i>Alternaria</i> , <i>Aspergillus</i> , <i>Fusarium</i> , <i>Geotrichum</i> , <i>Macrophomina</i> , <i>Microsporum</i> , <i>Penicillium</i> , <i>Pythium</i> , <i>Rhizoctonia</i> , <i>Trichophyton</i> , several <i>Candida</i> species, <i>Cryptosporidium parvum</i>	NRP-PK	MIC: 0.5-32 µg.mL <sup>-1</sup> / <i>Cryptosporidium parvum</i> in vitro with limited cytotoxicity (50% effective concentration [EC <sub>50</sub> ]: 120 nM versus 50% cytotoxic concentration [TC <sub>50</sub> ]= 988 nM)	Disrupts fungal membrane morphology and induces apoptosis	[96,97,99]
		<i>Burkholderia pyrrocinia</i> Lyc2	<i>Aspergillus</i> , <i>Cladosporium</i> , <i>Cochliobolus heterostrophus</i> , <i>Colletotrichum acutatum</i> , <i>Gaeumannomyces graminis</i> , <i>Geotrichum candidum</i> , <i>Glomerella cingulate</i> , <i>Thielaviopsis basicola</i> , <i>Candida albicans</i> , <i>Candida glabrata</i> , <i>Cryptococcus neoformans</i> , <i>Saccharomyces cerevisiae</i> , <i>Aspergillus niger</i> , <i>Microsporum gypseum</i> , <i>Epidermophyton floccosum</i> , <i>Trichophyton mentagrophyte</i> , <i>Trichophyton rubrum</i> , <i>Fusarium oxysporum</i> , <i>Rhizopus stolonifera</i>		ND		[101]
60, 61	Cepacidine A <sub>1</sub> and A <sub>2</sub>	<i>Burkholderia cepacia</i> AF 2001		NRP-PK	MIC: 0.013-0.391 µg.mL <sup>-1</sup>	Disrupts fungal membrane morphology and induces apoptosis	[103,104]

	AFC-BC11	<i>Burkholderia cepacia</i> BC11	<i>Rhizoctonia solani</i> , <i>Pythium ultimum</i> , <i>Colletotrichum</i> , <i>Helminthosporium maydis</i> , <i>Botrytis cinerea</i> , <i>Fusarium</i> , <i>Rhizopus stolonifer</i> , <i>Rhodotorula glutinis</i> , <i>Sclerotium rolfsii</i> , <i>Scopulariopsis brevicaulis</i>	NRP-PK	MIC: 0.4-10.8 $\mu\text{g.mL}^{-1}$	Binding to the phosphate groups of LPS of the outer and inner membrane	[107]
		<i>Burkholderia gladioli</i> HKI0739	<i>Bacillus thuringiensis</i> , <i>Paenibacillus larvae</i>	NRP	MIC: 3.1-12.5 $\mu\text{g.mL}^{-1}$	Involved in inhibiting swarming	[108]
62	Icosalide A1	<i>Burkholderia gladioli</i> BCC0238	<i>Candida albicans</i> , <i>Enterococcus faecium</i> , <i>Streptococcus pyogenes</i>	NRP	MIC: 8-16 $\mu\text{g.mL}^{-1}$	Binding to the phosphate groups of LPS of the outer and inner membrane	[109]
63	Bactobolin A		<i>Bacillus cereus</i> , <i>Bacillus subtilis</i> , <i>Burkholderia cenocepacia</i> , <i>Paraburkholderia kururiensis</i> , <i>Burkholderia vietnamiensis</i> , <i>Chromobacterium violaceum</i> , <i>Escherichia coli</i> , <i>Flavobacterium johnsoniae</i> , <i>Klebsiella pneumoniae</i> , <i>Mycobacterium marinum</i> , <i>Pseudomonas aeruginosa</i> , <i>Pseudomonas fluorescens</i> , <i>Ralstonia pickettii</i> , <i>Salmonella enteria</i> serovar <i>Typhimurium</i> , <i>Staphylococcus aureus</i> , <i>Streptococcus pyogenes</i>		MIC: 0.19-50 $\mu\text{g.mL}^{-1}$		
65	Bactobolin C	<i>Burkholderia thailandensis</i>		PK	MIC: 1.56-50 $\mu\text{g.mL}^{-1}$	Inhibition of peptide chain elongation by binding to peptidyl transferase on the ribosome	[111]
	Xylocandins A1 and A2	<i>Burkholderia cepacia</i> ATCC 3927	<i>Candida</i> species, <i>Trypophyton mentagrophytes</i> , <i>Trypophyton rubrum</i> , <i>Epidermophyton floccosum</i> , <i>Microsporium canis</i>	NRP-PK	MIC: 0.05-0.4 $\mu\text{g.mL}^{-1}$	Binding to the phosphate groups of LPS of the outer and inner membrane	[113]
67	Fragin	<i>Burkholderia cenocepacia</i> H111 <i>Burkholderia pseudomallei</i> K96243	<i>Fusarium solani</i> , <i>Bacillus cereus</i> , <i>Bacillus subtilis</i> , <i>Bacillus thuringiensis</i> , <i>Staphylococcus aureus</i> , <i>Saccharomyces cerevisiae</i>	NRP	20-80 $\mu\text{g}$		[114]
68	BTH-II0204-207:A	<i>Burkholderia thailandensis</i>	<i>Bacillus subtilis</i> , <i>Saccharomyces cerevisiae</i>	NRP	MIC: 11-33 $\mu\text{g.mL}^{-1}$	Inhibition of type-4 phosphodiesterases (PDE4)	[115]
69	Lagriamide	<i>Burkholderia gladioli</i> Lv-StB	<i>Aspergillus niger</i> , <i>Purpureocillium lilacinum</i>	PK	50 $\mu\text{g}$	Similar to bistramides	[116]
70	Isosulfazecin	<i>Burkholderia ubonensis</i>	<i>Salmonella enterica</i> serovar <i>Typhimurium</i> , <i>Escherichia coli</i> , <i>Proteus vulgaris</i> , <i>Proteus mirabilis</i> , <i>Serratia marcescens</i> , <i>Enterococcus faecalis</i> , <i>Bacillus subtilis</i>	NRP	MIC: 0.78-100 $\mu\text{g.mL}^{-1}$	Inhibition of cell wall biosynthesis	[117,118]
72,73	Spliceostatin	<i>Burkholderia thailandensis</i> , <i>Burkholderia</i> sp. FERM BP-3421	Potent cytotoxicity against tumor cell lines	NRP-PK	IC <sub>50</sub> : 0.11-950 nM	Spliceosome inhibitor	[124,125]
	Diketopiperazines	<i>Burkholderia cepacia</i> CF-66, <i>Burkholderia cenocepacia</i> J2315 <sup>T</sup>	<i>Candida albicans</i>	NRP	1 mL	Cyclic dipeptides	[126,127]
OTHER ANTIMICROBIAL COMPOUNDS							
74	Sinapiogladioside	<i>Burkholderia gladioli</i> Lv-StA	<i>Purpureocillium lilacinum</i> , <i>Aspergillus fumigatus</i> , <i>Penicillium notatum</i>	Isothiocyanate moiety	50 $\mu\text{g}$		[51]
	Compound 1	<i>Burkholderia orbicola</i> TAtl-371 <sup>T</sup>	<i>Tatumella terrestris</i> SHS 2008 <sup>T</sup>		10 $\mu\text{g}$		[66]
75	Cepaciamide A	<i>Burkholderia cepacia</i> D-202	<i>Botrytis cinerea</i>		100 ppm		[130]
	Bg_9562 protein	<i>Burkholderia gladioli</i> NGJ1	<i>Saccharomyces cerevisiae</i> , <i>Candida albicans</i> , <i>Alternaria brassicae</i> , <i>Magnaporthe oryzae</i> , <i>Venturia inaequalis</i> , <i>Fusarium oxysporum</i> , <i>Alternaria</i> sp., <i>Dedymella</i> sp., <i>Phytophthora</i> sp., <i>Colletotrichum</i> sp., <i>Ascochyta rabiei</i> , <i>Neofusicoccum</i> sp.	Prophage tail-like	MIC: 15 $\mu\text{g.mL}^{-1}$	Mycophagy, causes hyphal disintegration	[132]
76	MSSP2	<i>Burkholderia</i> sp.	<i>Pythium ultimum</i> , <i>Phytophthora capsici</i> and <i>Sclerotinia sclerotiorum</i>		ED <sub>50</sub> : 35.7-54.9 ppm		[133]
	Altericidins A, B and C	<i>Burkholderia cepacia</i> KB-1	<i>Alteraria kikuchiana</i> , <i>Ustilago maydis</i>	Peptide antibiotics	8-50 ppm	Inhibits the transport of precursors for the biosynthesis of the fungal cytoplasmic membrane	[134]
	Bulgecins	<i>Burkholderia</i> sp.	No antimicrobial activity/synergism with $\beta$ -lactam antibiotics	Glycopeptide	1-1000 $\mu\text{g.mL}^{-1}$	Induces bulge formation acting in	[119]

		<i>ubonensis</i> SB-72310				synergism with $\beta$ -lactamic antibiotics without binding to PBPs	
	CF66I	<i>Burkholderia cepacia</i> CF-66	<i>Rhizoctonia solani</i> , <i>Fusarium graminearum</i> , <i>Fusarium moniliforme</i> , <i>Fusarium oxysporum</i> , <i>Fusarium sambucinum</i> , <i>Fusarium semitectum</i> , <i>Fusarium solani</i> , <i>Rosselinia necatrix</i> , <i>Aspergillus flavus</i> , <i>Aspergillus niger</i> , <i>Cochilobus carbonum</i> , <i>Botrytis cinerea</i> , <i>Mucor hiemolis</i> , <i>Penicillium chrysogenum</i> , <i>Rhizopus oryzae</i> , <i>Candida albicans</i> , <i>Cryptococcus meoformens</i> , <i>Pichia membranae</i> , <i>Saccharomyces cerevisiae</i> , <i>Alternaria alternata</i> , <i>Bipolaris sorokiniana</i> , <i>Colletotrichum lindemuthianum</i> , <i>Curvularia lunata</i> , <i>Monochaetia hirta</i>		MIC: 2.5-29 $\mu\text{g.mL}^{-1}$	Reduced the extension rates of hyphae and induced changes in their morphology, forming multiple branches	[120,152]
71	Malleonitrone	<i>Burkholderia thailandensis</i> E264	<i>Pseudomonas aeruginosa</i> , <i>Bacillus subtilis</i> , <i>Staphylococcus aureus</i> , <i>Enterococcus faecalis</i> , <i>Candida albicans</i>	Nitrone conjugated	MIC: 10-22 $\mu\text{g.mL}^{-1}$	Active against the integrated QS molecule (IQS)	[123]
RHAMNOLIPIDS							
77	di-rhamnolipids C <sub>14</sub> -C <sub>14</sub>	<i>Burkholderia thailandensis</i> E264, <i>Burkholderia kururiensis</i> KP23, <i>B. glumae</i> AU6208, <i>Burkholderia pseudomallei</i> , <i>Burkholderia thailandensis</i> E264, <i>Burkholderia plantarii</i> DSM 9509 <sup>T</sup> , <i>Burkholderia glumae</i> AU6208	<i>Streptococcus sanguinis</i> , <i>Streptococcus oralis</i> , <i>Neisseria mucosa</i> , <i>Actinomyces naeslundii</i> /Citotoxic effect on phagocytic (HL60) and nonphagocytic (HeLa) cell lines		MIC: 0.15-1.25 $\text{mg.mL}^{-1}$ /Citotoxic effects: 20-80 hemolytic units	Surface activity, wetting ability, detergency/ promote the uptake and biodegradation of poorly soluble substrates, act as immune modulators and virulence factors and are involved in surface motility and in bacterial biofilm development/ Induction of reactive oxygen species/ Tenoactive properties/ Cytotoxic and hemolytic activity	[136,137,139,140]
78	di-rhamnolipids C <sub>12</sub> -C <sub>14</sub>	ND	ND		ND		[137,138]
COMPOUNDS WITH DUAL EFFECT							
79, 80, 81, 82, 83	Burkholdines	<i>Burkholderia ambifaria</i> 2.2N	<i>Saccharomyces cerevisiae</i> , <i>Candida albicans</i> , <i>Aspergillus niger</i> , hemolytic activity	NRP-PK	MIC: 0.1-31 $\mu\text{g.mL}^{-1}$ /Hemolytic activity: 4.5-37 $\mu\text{g.mL}^{-1}$	Possible virulence factors	[141,142]
84	Tropolone	<i>Burkholderia plantarii</i>	<i>Penicillium oxalicum</i> , <i>Bacillus subtilis</i> , <i>Sarcina lutea</i> , <i>Saccharomyces pastorianus</i>			Iron-quelating property Hemolytic activity due to their interaction with erythrocyte membrane cholesterol	[143,144,145]
	Cepalydin I and cepalydin II	<i>Burkholderia cepacia</i> JN106	<i>Saccharomyces cerevisiae</i> , <i>Cryptococcus neoformans</i> , <i>Candida albicans</i>		5-100 hemolytic units		[146]
VOC, volatile organic compound. NRP, non-ribosomal peptide. *Undetermined, however, the information was taken from other structurally related compounds.							