

***Helichrysum stoechas* (L.) Moench Inflorescence Extract for Tomato Diseases Management**

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SUPPLEMENTARY MATERIALS

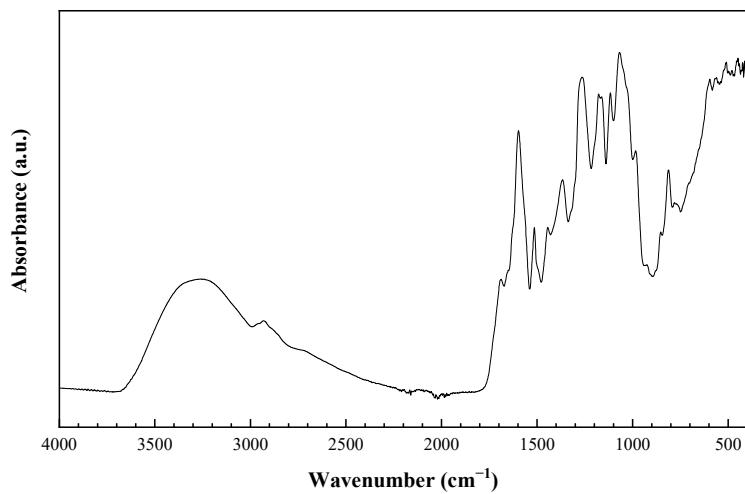


Figure S1. ATR-FTIR spectrum of *Helichrysum stoechas* dried inflorescences.

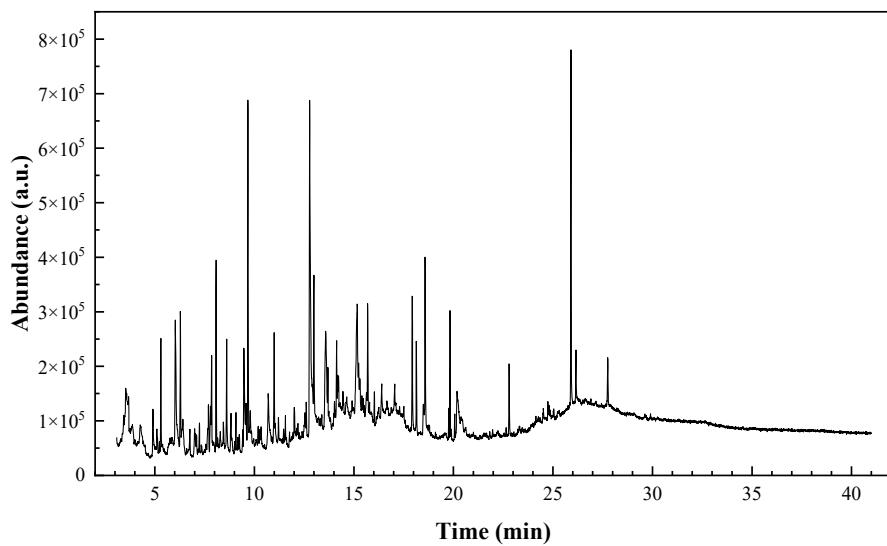


Figure S2. GC-MS chromatogram of *Helichrysum stoechas* hydromethanolic inflorescence extract.

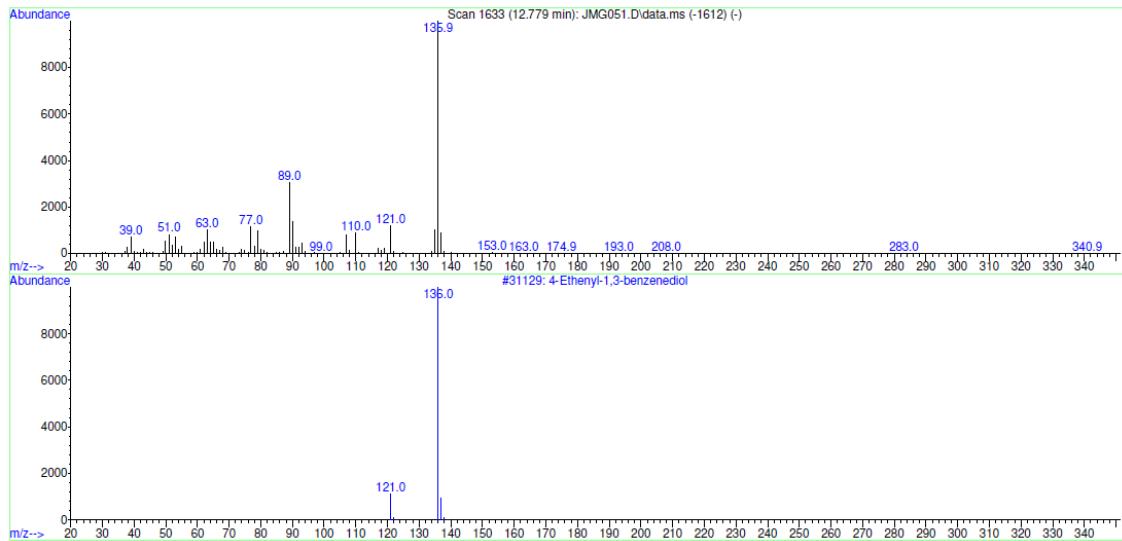


Figure S3. Comparison of MS spectra of 4-ethenyl-1,3-benzenediol with that of the chemical species detected at RT=12.779 min.

Table S1. Efficacies reported in the literature for plant extracts against the six phytopathogenic fungal taxa under study.

Pathogen	Source/Extraction Medium	Plant	Efficacy	Ref.
<i>A. alternata</i>	Water:methanol (1:1 v/v)	<i>Helichrysum stoechas</i> inflorescences	MIC = 500 µg·mL ⁻¹	This work
		<i>Acacia nilotica</i> leaves	IR = 35.75%	
		<i>Datura stramonium</i> leaves	IR = 57.50%	
	Aqueous extracts at 1000 µg·mL ⁻¹	<i>Allium sativum</i> cloves	IR = 64.75%	[1]
		<i>Zingiber officinale</i> rhizome	IR = 42.25%	
		<i>Amaranthus viridis</i> leaves	IR = 39.25%	
		<i>Azadirachta indica</i> kernel and leaves	IR = 62.75%	
	Aqueous, acetone, ethanol, or methanol extracts at 200,000 µg·mL ⁻¹	<i>Ocimum sanctum</i> leaves	IR = 44.75%	[2]
		<i>Lantana camara</i> leaves	IR = n.a.–100%	
	Methanol extracts at 7000 µg·mL ⁻¹	<i>Artemisia annua</i> leaves	IR = 43%	
<i>A. alternata</i>		<i>Anadenanthera colubrina</i> barks	IR = 46%	[3]*
		<i>Ruta graveolens</i> flowers and leaves	IR = 28%	
		<i>Curcuma longa</i> leaves	IR = 50%	
	Methanol extracts at 7.5%	<i>Ocimum tenuiflorum</i> leaves	IR = 51.90%	[4]
		<i>A. indica</i> leaves	IR = 45.71%	
		<i>Aloe vera</i> leaves	IR = 34.28%	
		<i>Calotropis gigantea</i> leaves	IR = 84.88%	
		<i>Alstonia scholaris</i> leaves	IR = 47.66%	
	Aqueous extracts at 15%	<i>Z. officinale</i> rhizomes	IR = 65.55%	
		<i>D. stramonium</i> leaves	IR = 68.33%	[5]
<i>A. alternata</i>	Aqueous extract at 4%	<i>A. sativum</i> cloves	IR = 100%	
		<i>A. indica</i> leaves	IR = 88.22%	
		<i>A. vera</i> leaves	IR = 52.44%	
	Aqueous extracts at 10%	<i>Cinnamomum zeylanicum</i> bark	n.a.	[6]
		<i>Oscimum sanctum</i>	IR = 18.47%	
		<i>A. indica</i>	IR = 35.83%	
		<i>Eucalyptus globulus</i>	IR = 14.72%	[7]
		<i>A. sativum</i>	IR = 26.38%	
		<i>C. longa</i>	IR = 54.92%	
	Aqueous or methanol extracts at 6%	<i>Annona muricata</i> pulp or seeds	IR = 47.9–90.93%	[8]
<i>A. fumigatus</i>	Methanol extract	<i>Phoenix dactylifera</i> pits	IC ₅₀ = 2800 µg·mL ⁻¹	[9]
	Aqueous (10%) or ethanol extracts (5%)	<i>Artemisia absinthium</i>	IR = 40–83.33%	[10]

<i>Colletotrichum</i> spp.	Aqueous extract at 20%	<i>Rosmarinus officinalis</i>	IR = 26.67–83.33%	[11]
		<i>D. stramonium</i>	IR = 16.67–83.33%	
		<i>Xanthium strumarium</i>	IR = 30–86.67%	
		<i>A. indica</i> leaves	IR = 74.92%	
		<i>Calotropis gigantia</i> leaves	IR = 58.14%	
	Aqueous extracts at 10%	<i>C. longa</i> leaves	IR = 66.55%	[12]
		<i>A. sativum</i> cloves	IR = 77.25%	
		<i>Z. officinale</i> rhizomes	IR = 77%	
		<i>Ocimum sanctum</i> leaves	IR = 61.97%	
		<i>Allium cepa</i> bulbs	IR = 74.19%	
	Water:methanol (1:1 v/v) against <i>Colletotrichum coccodes</i>	<i>Parthenium hysterophorus</i> leaves	IR = 43.71%	[12]
		<i>Eucalyptus obliqua</i> leaves	IR = 72.82%	
		<i>A. indica</i>	IR = 68.30%	
		<i>Sapindus mukorossi</i>	IR = 73.04%	
		<i>A. sativum</i>	IR = 42.11%	
	Ethanol extracts at 750 µg·mL ⁻¹ against <i>Colletotrichum acutatum</i>	<i>Calotropis procera</i>	IR = 20.96%	[13]*
		<i>Psidium guajava</i>	IR = 40.93%	
		<i>Vitex negundo</i>	IR = 35.71%	
		<i>Glyricidia maculata</i>	IR = 44.33%	
		<i>Solanum torvum</i>	IR = 31.82%	
	Aqueous extracts at 10% against <i>Colletotrichum gloeosporioides</i>	<i>L. camara</i>	IR = 45.33%	[14]*
		<i>H. stoechas</i> inflorescences	MIC = 375 µg·mL ⁻¹	
		<i>A. sativum</i> peels	IR ≥ 50%	
		<i>A. cepa</i> peels	IR ≥ 50%	
		<i>Ageratum conyzoides</i> leaves	IR = 56.83%	
	Aqueous extracts at 20% against <i>C. gloeosporioides</i>	<i>A. sativum</i> leaves	IR = 100%	[15]
		<i>Jatropha curcas</i> leaves	IR = 49.90%	
		<i>Ocimum basilicum</i> leaves	IR = 100%	
		<i>Vernonia amygdalina</i> leaves	IR = 48.32%	
		<i>Achras sapota</i> leaves or stems	IR = 37.5–42.5%	

	<i>Persea americana</i> leaves or stems	IR = 30–100%	
	<i>Pouteria sapota</i> leaves or stems	IR = 12.5–52.5%	
	<i>Spondias purpurea</i> leaves or stems	IR = 37.5–50%	
	<i>Tamarindus indicus</i> leaves or stems	IR = 42.5–65%	
	<i>Piper nigrum</i> seeds	IR = 82.19%	
	<i>Z. officinale</i> rhizomes	IR = 76.98%	
Aqueous extracts at 90% against <i>Colletotrichum</i> sp.	<i>A. indica</i> leaves	IR = 57.30%	[16]
	<i>C. papaya</i> leaves	IR = 51.97%	
	<i>Nicotiana tabacum</i> leaves	IR = 61.82%	
	<i>Acacia pennatula</i> roots	IR = 54.4%	
	<i>Petiveria alliacea</i> leaves	IR = 6.2%	
	<i>Piscidia piscipula</i> leaves	IR = 56.2%	
Methanol extracts at 2000 µg·mL ⁻¹ against <i>C. gloeosporioides</i>	<i>Pithecellobium albicans</i> leaves or roots	IR = 4.4–23.1%	[17]
	<i>Pithecellobium dulce</i> leaves or roots	IR = 21.2–81.2%	
	<i>Tribulus cistoides</i> leaves or roots	IR = 23.1%	
	<i>Viguiera dentata</i> leaves	IR = 43.7%	
	<i>A. sativum</i> leaves	IR = 72.73%	
Aqueous extracts at 20% against <i>Colletotrichum dematum</i>	<i>Z. officinale</i> leaves	IR = 39.83%	[18]
	<i>A. cepa</i> leaves	IR = 53.47%	
	<i>A. indica</i> leaves	IR = 32.47%	
Acetone, aqueous or methanol extracts at 20% against <i>C. gloeosporioides</i>	<i>Prosopis hysterophorus</i> leaves	IR = 79.6–100%	[19]
	<i>L. camara</i> leaves	IR = 65.2–86.3%	
	<i>Mimosa diplosticha</i> leaves	IR = 26.6–56.7%	
	<i>P. hysterophorus</i> leaves	IR = 28.1–64.8%	
	<i>Echhornia crassipes</i> leaves	IR = 45.2–71.1%	
Methanol extracts at 400,000 µg·mL ⁻¹ against <i>C. gloeosporioides</i>	<i>Bromelia pinguin</i> pulp or peels	IR < 5%	[20]
	<i>Psidium sartorianum</i> pulp or seeds	IR = 20.4–25.7%	
	<i>S. purpurea</i> Pulp or peels	IR < 5%	
	<i>Echeveria craigiana</i> leaves	IR < 5%	
	<i>Echeveria kinnachii</i> leaves	IR = 23.1%	
	<i>Echeveria subrigida</i> leaves	IR < 5%	
	<i>P. dulce</i> pulp, peles or seeds	IR < 5–21.5%	
	<i>Randia echinocarpa</i> pulp or seeds	IR = 4.73–60.8%	
	<i>Vitex mollis</i> pulp or seeds	IR = 21.4–100%	
	<i>A. sativum</i> bulbs	MIC = n.a.–6250 µg·mL ⁻¹	[21]

Acetone, aqueous or ethyl acetate extracts against <i>Colletotrichum lindemuthianum</i> and <i>C. dematium</i>	<i>Agapanthus caulescens</i> whole plant <i>Syzygium cordatum</i> fruits <i>C. papaya</i> leaves <i>Chlrophytym comosum</i> whole plant <i>Ipomoea batatas</i> leaves	MIC = n.a.–6250 µg·mL ⁻¹ MIC = 780–6250 µg·mL ⁻¹ MIC = n.a.–1560 µg·mL ⁻¹ MIC = n.a.–12,500 µg·mL ⁻¹ n.a.	
Acetone or ethanol extracts at 5000 µg·mL ⁻¹ against <i>C. gloeosporioides</i>	<i>Lantana hirta</i> leaves or flowers <i>Argemone ochroleuca</i> leaves-fruits or roots <i>Adenophyllum porophyllum</i> leaves <i>Swietenia macrophylla</i> seeds <i>Z. officinale</i> rhizomes <i>N. tabacum</i> leaves <i>C. gigantea</i> leaves <i>A. sativum</i> cloves	IR = n.a.–100% IR = n.a.–100% IR = 10–100% IR = 26.24% IR = 34.87% IR = 18.54% IR = 24.38% IR = 60.45%	[22]
Aqueous extract at 70% against <i>C. gloeosporioides</i>	<i>Sonneratia apetala</i> pulp or seeds <i>Pimenta dioica</i> leaves <i>Piper auritum</i> leaves <i>Plectranthus amboinicus</i> leaves <i>P. guajava</i> leaves	IR = 29.64–40.39% MIC = 5000–10,000 µg·mL ⁻¹ MIC = 40,000 µg·mL ⁻¹ MIC = 5000–10,000 µg·mL ⁻¹ MIC > 40,000 µg·mL ⁻¹	[23]
Ethanol extract against <i>Colletotrichum</i> spp.	<i>Hydnocarpus anthelmintica</i> fruits <i>Crateva magna</i> fruits <i>Caesalpinia sappan</i> barks <i>Xanthophyllum lanceatum</i> fruits <i>Carallia brachiata</i> barks <i>Terminalia arjuna</i> leaves <i>Clerodendrum infortunatum</i> leaves <i>Anethum graveolens</i> seeds <i>Z. officinale</i> rhizomes <i>A. sativum</i> bulbs <i>L. camara</i> leaves <i>N. tabacum</i> leaves <i>Polygonum hydropiper</i> leaves <i>Pongamia pinnata</i> seeds <i>Polyalthia longifolia</i> leaves <i>Tectona grandis</i> leaves	IR = 51.11% IR = 52.22% IR = 34.78% IR = 20% IR = 18.11% IR = 35.19–49.63% IR = 9.63–78.15% IR = 30.74–49.67% IR = 9.26–87.41% IR = 19.63–34.48% IR = 38.15–51.48% IR = 15.19–41.48% IR = 15.19–38.30% IR = 11.48–37.89% IR = 10.37–84.07% IR = 27.78–60.59%	[24]
Ethanol extracts at 10,000 µg·mL ⁻¹ against <i>C. gloeosporioides</i>	<i>Rhus coriaria</i> fruits	MIC = 5 µg·mL ⁻¹	[25]
Chloroform, hexane, or methanol extracts at 400 µg·mL ⁻¹ against <i>Colletotrichum musae</i>			[26]
Aqueous crude extract against <i>C. acutatum</i>			[27]

	Water:methanol (1:1 v/v)	<i>H. stoechas</i> inflorescences	MIC = 500 µg·mL ⁻¹	This work
	Methanol/water extract (1:1 v/v)	<i>Armeria maritima</i> flowers	MIC = 750 µg·mL ⁻¹	[28]
	Aqueous extracts at 4%	<i>C. zeylanicum</i> barks <i>A. indica</i> leaves	IR ≤ 30% n.a.	[6]
		<i>P. hysterophorus</i> leaves and flowers	IR = 2.6–15.9%	
		<i>Momordica charantia</i> leaves	IR = 14.4–24.4%	
		<i>A. sativum</i> cloves	IR = 52.6–63.3%	
	Aqueous extracts at 5, 10, and 20%	<i>E. globulus</i> leaves <i>C. procera</i> leaves	IR = 34.3–61.8% n.a.	[29]
		<i>A. vera</i> leaves	IR = 16.6%	
		<i>Beta vulgaris</i> roots	IR = 6.3–10.3%	
		<i>D. stramonium</i> leaves	IR = 61.1%	
	Aqueous or propanol extracts at 1%	<i>Punica granatum</i> fruits	IR = 62–78%	[30]
	Chloroform, ethyl acetate, methanol or hexane extracts	<i>Cestrum nocturnum</i> flowers	MIC = 500–1000 µg·mL ⁻¹	[31]
<i>F. oxysporum</i>	Crude extracts at 5, 10, and 20%	<i>A. indica</i> leaves	IR = 24.1–62.0%	
		<i>O. sanctum</i> leaves	IR = 7.0–17.0%	
		<i>Datura metel</i> leaves	IR = 10.1–34.2%	
		<i>Cassia alata</i> leaves	IR = 46.8–74.7%	[32]
		<i>Asparagus racemosus</i> roots	IR = 44.3–57.0%	
		<i>A. sativum</i> bulbs	IR = 17.6–34.2%	
		<i>Z. officinale</i> tubers	IR = 23.7–39.5%	
		<i>Flourensia microphylla</i> leaves	MIC = 1500 µL·L ⁻¹	
		<i>Flourensia cernua</i> leaves	MIC = 1500 µL·L ⁻¹	[33]
		<i>Flourensia retinophylla</i> leaves	MIC = 1500 µL·L ⁻¹	
	Aqueous extracts at 5–50%	<i>Moringa oleifera</i> leaves, roots or pud coats	IR = 36–100%	[34]
	Aqueous extracts at 25%	<i>A. nilotica</i> leaves	IR = 82%	
		<i>A. zapota</i> leaves	IR = 34.8%	
		<i>D. stramonium</i> leaves	IR = 67.5%	
		<i>E. officinalis</i> leaves	IR = 79.5%	
		<i>E. globulus</i> leaves	IR = 59.3%	
		<i>L. inermis</i> leaves	IR = 82.0%	
		<i>M. elengi</i> leaves	IR = 86.0%	
		<i>P. pterocarpum</i> leaves	IR = 53.3%	
		<i>P. longifolia</i> leaves	IR = 36.3%	
		<i>P. juliflora</i> leaves	IR = 80.3%	

<i>V. dahliae</i>	Aqueous extracts at 0.2% (w/v)	<i>P. granatum</i> leaves	IR = 73.8%	[36]
		<i>Syzygium. cumini</i> leaves	IR = 69.5%	
		<i>Filipendula</i> spp. flowers	IR = 95.9%	
		<i>A. sativum</i>	IR = 81.4%	
	Ethanolic extract	<i>Mentha spicata</i> leaves and stems	MIC = 5%	[37]
	Aqueous extract	<i>A. sativum</i> leaves	MIC = 7000 µg·mL ⁻¹	[38]
	Water:methanol (1:1 v/v)	<i>H. stoechas</i> inflorescences	MIC = 375 µg·mL ⁻¹	This work
	Methanol extract	<i>P. dactylifera</i> pits	IC ₅₀ = 6700 µg·mL ⁻¹	[9]
	Aqueous ammonia extracts	<i>Sambucus nigra</i> flower extract	MIC = 1500 µg·mL ⁻¹	[39]
		<i>S. nigra</i> leaf extract	MIC = 1500 µg·mL ⁻¹	
	Aqueous ammonia extract	<i>Uncaria tomentosa</i> bark extract	MIC = 500 µg·mL ⁻¹	[40]
	Aqueous extracts	<i>Origanum heracleoticum</i> inflorescences	MIC > 500,000 µg·mL ⁻¹	[41]
		<i>Salvia officinalis</i> leaves	MIC > 500,000 µg·mL ⁻¹	
		<i>R. officinalis</i> leaves and flowers	MIC > 500,000 µg·mL ⁻¹	
	Aqueous extracts	<i>Mentha piperita</i>	MIC >100,000 µg·mL ⁻¹	[42]
		<i>Thymus vulgaris</i>	MIC >100,000 µg·mL ⁻¹	
		<i>Lavandula angustifolia</i>	MIC >100,000 µg·mL ⁻¹	
	Ethyl acetate extract	<i>Artemisia argyi</i>	EC ₅₀ = 1227 µg·mL ⁻¹	[43]
	Methanol extract	<i>Haplophyllum tuberculatum</i> aerial parts	MIC > 1000 µg·mL ⁻¹	[44]
	Chloroform extract	<i>Chrysanthemum coronarium</i> aerial parts	MIC = 1000 µg·mL ⁻¹	
	Acetone extracts	<i>A. sativum</i> leaves and stems	MIC > 5000 µg·mL ⁻¹	[45]
		<i>Allium</i> sp. leaves and stems	MIC > 5000 µg·mL ⁻¹	
		<i>Atropa belladonna</i> leaves and stems	MIC > 5000 µg·mL ⁻¹	
		<i>A. indica</i> leaves and stems	MIC > 5000 µg·mL ⁻¹	
		<i>Castanea sativa</i> leaves and stems	MIC > 5000 µg·mL ⁻¹	
		<i>Citrus aurantium</i> leaves and stems	MIC > 5000 µg·mL ⁻¹	
		<i>Citrus</i> sp. leaves and stems	MIC = 5000 µg·mL ⁻¹	
		<i>Inula viscosa</i> leaves and stems	MIC > 5000 µg·mL ⁻¹	
		<i>Juniperus communis</i> leaves and stems	MIC > 5000 µg·mL ⁻¹	
		<i>Olea europaea</i> leaves and stems	MIC > 5000 µg·mL ⁻¹	
		<i>Papaver rhoes</i> leaves and stems	MIC > 5000 µg·mL ⁻¹	
		<i>Pistacia lentiscus</i> leaves and stems	MIC > 5000 µg·mL ⁻¹	
		<i>S. officinalis</i> leaves and stems	MIC > 5000 µg·mL ⁻¹	
		<i>S. nigra</i> leaves and stems	MIC > 5000 µg·mL ⁻¹	

	<i>Thymus</i> sp. leaves and stems	MIC \geq 5000 $\mu\text{g}\cdot\text{mL}^{-1}$	
Water:methanol (1:1 v/v)	<i>H. stoechas</i> inflorescences	MIC = 187.5 $\mu\text{g}\cdot\text{mL}^{-1}$	This work
	<i>Larrea tridentata</i> leaves	IC ₅₀ = 185–5710 $\mu\text{g}\cdot\text{mL}^{-1}$	
	<i>F. cernua</i> leaves	IC ₅₀ = 420–2120 $\mu\text{g}\cdot\text{mL}^{-1}$	
Aqueous, lanolin or cocoa butter extracts	<i>Agave lechuguilla</i> leaves	IC ₅₀ = n.a.–17,000 $\mu\text{g}\cdot\text{mL}^{-1}$	[46]
	<i>Opuntia</i> sp. stalks	IC ₅₀ = 3830–20,800 $\mu\text{g}\cdot\text{mL}^{-1}$	
	<i>Yucca</i> sp. leaves	IC ₅₀ = 8140–57,400 $\mu\text{g}\cdot\text{mL}^{-1}$	
Ethanol/water extracts at 4%	<i>Cinnamomum verum</i>	IR = 95.8%	
	<i>Pimpinella anisum</i>	IR = 90.8%	
	<i>Nigella sativa</i>	IR = 90.5%	[47]
	<i>Syzygium aromaticum</i>	IR = 100%	
R. solani	<i>P. hysterophorus</i> leaves and flowers	IR = 19.6–32.2%	
	<i>M. charantia</i> leaves	IR = 37.7–61.1%	
	<i>A. sativum</i> cloves	IR = 62.2–63.3%	
Aqueous extracts at 5, 10, and 20%	<i>E. globulus</i> leaves	IR = 59.6–70.7%	[29]
	<i>C. procera</i> leaves	IR = 11.1%	
	<i>A. vera</i> leaves	IR = 33.3–38.8%	
	<i>B. vulgaris</i> root	IR = 36.3–40.3%	
	<i>D. stramonium</i> leaves	IR = 55.5–72.2%	
	<i>Lawsonia inermis</i> leaves	IR = 100%	
Aqueous extracts at 100%	<i>Pelargonium graveolens</i> leaves	IR = 22%	
	<i>P. longifolia</i> leaves	IR = 26%	
Ethyl acetate, methanol or n-hexane extracts at 1000 $\mu\text{g}\cdot\text{mL}^{-1}$	<i>Piper betel</i> leaves	IR = 100%	[48]
	<i>L. inermis</i> leaves	IR = n.a.–100%	
	<i>P. graveolens</i> leaves	IR = n.a.–100%	
	<i>P. longifolia</i> leaves	IR = n.a.–100%	
	<i>P. betel</i> leaves	IR = n.a.–100%	
Aqueous extracts at 5%	<i>Capsicum frutescens</i> fruits	IR = 71.1%	
	<i>E. globulus</i> leaves	IR = 37.8%	
	<i>Eruca sativa</i> seeds	IR = 34.4%	
	<i>A. sativum</i> bulbs	IR = 40%	
	<i>Trigonella foenum-graecum</i> seeds	IR = 42.2%	[49]*
	<i>L. camara</i> flowers and leaves	IR = 43.3%	
	<i>Cymbopogon citratus</i> leaves	IR = 55.6%	
	<i>A. cepa</i> bulbs or seeds	IR = 32.3–58.9%	

	<i>S. officinalis</i> leaves	IR = 33.3%
	<i>Polystichum squarrosum</i> leaves	IR = 24.35%
	<i>Adiantum venustum</i> leaves	IR = 10.57%
Aqueous extracts at 20%	<i>P. hysterophorus</i> leaves	IR = 33.12%
	<i>Urtica dioica</i> leaves	IR = 18.80%
	<i>Cannabis sativa</i> leaves	IR = 47.59%
	<i>H. anthelmintica</i> fruits	IR = 100%
Ethanol extracts at 10,000 µg·mL ⁻¹	<i>C. magna</i> fruits	IR = 17.41%
	<i>C. sappan</i> barks	n.a.
	<i>X. lanceatum</i> fruits	IR = 57.41%
	<i>C. brachiata</i> barks	IR = 4.81%
	<i>Eucalyptus</i>	IR = 32.9%
	<i>Pelargonium cucullatum</i>	IR = 48.1%
Aqueous or ethanol extracts at 1:1 (w/v)	<i>Mentha suaveolens</i>	IR = 35%
	<i>Alpinia zerumbet</i>	IR = 53.6%
	<i>Artemisia capillaris</i>	IR = 63.7%
	<i>R. officinalis</i>	IR = 67.7%
	<i>S. aromaticum</i>	IR = 100%
	<i>A. indica</i>	IR = 38.1–87.5%
	<i>A. indica</i>	IR = 76.67%
	<i>Ocimum basicum</i>	IR = 61.11%
	<i>Cymbopogon flexousus</i>	IR = 94.44%
Aqueous extracts at 15%	<i>T. vulgaris</i>	IR = 94.44%
	<i>A. vera</i>	IR = 61.11%
	<i>Tagetes patula</i>	IR = 92.59%
	<i>Cordia curassavica</i>	IR = 85.18%
	<i>Aegle marmelos</i>	IR = 64.82%
	<i>Allium fistulosum</i>	n.a.
	<i>S. aromaticum</i>	IR = 94.44%
	<i>Calotropis gigantean</i>	IR = 9.26%
Aqueous extracts at 10%	<i>A. sativum</i> cloves	IR = 100%
	<i>Tagetes spp.</i> leaves	IR = 76.30%
	<i>E. globulus</i> leaves	IR = 75.56%
	<i>C. longa</i> rhizomes	IR = 78.52%
	<i>Z. officinale</i> rhizomes	IR = 80%

[50]

[25]

[51]*

[52]

[53]

	<i>A. cepa</i> bulbs	IR = 37.78%	
	<i>Ocimum</i> spp. leaves	IR = 37.78%	
	<i>Piper guineensis</i> leaves	IR = 84.4–100%	
	<i>O. sanctum</i> leaves	IR = 53.8–67.1%	
	<i>Ocimum gratissimum</i> leaves	IR = 58.7–72.3%	[54]
	<i>Cymbopogon citratus</i> leaves	IR = 72.5–86.8%	
	<i>C. lemon</i> leaves	IR = 9.5–20.8%	
	<i>T. arjuna</i> leaves	IR = 19.81–54.07%	
	<i>C. infortunatum</i> leaves	IR = 24.07–100%	
	<i>A. graveolens</i> seeds	IR = 61.11–85.93%	
	<i>Z. officinale</i> rhizomes	IR = 20.37–100%	
	<i>A. sativum</i> bulbs	IR = 20.74–27.41%	
	<i>L. camara</i> leaves	IR = 15.19–24.44%	[26]
	<i>N. tabacum</i> leaves	IR = 26.30–37.78%	
	<i>P. hydropiper</i> leaves	IR = 35.56–52.96%	
	<i>P. pinnata</i> seeds	IR = 17.41–22.96%	
	<i>P. longifolia</i> leaves	IR = 16.85–100%	
	<i>T. grandis</i> leaves	IR = 20.74–34.81%	
	Ethanic extract	<i>M. spicata</i> leaves and stems	MIC = 5% [37]
	Water:methanol (1:1 v/v)	<i>H. stoechas</i> inflorescences	MIC = 187.5 µg·mL ⁻¹ This work
	Methanol/water extract (1:1 v/v)	<i>A. maritima</i> flowers	MIC = 375 µg·mL ⁻¹ [28]
	Chloroform, ethyl acetate, methanol or hexane extracts	<i>C. nocturnum</i> flowers	MIC = 250–1000 µg·mL ⁻¹ [31]
<i>S. sclerotiorum</i>	Aqueous extracts	<i>Trachystemon orientalis</i> leaves or flowers	MIC = 1–7% [55]
	Crude extracts	<i>R. officinalis</i> leaves	MIC = 10% [56]
	Ethanol extract	<i>Salvia fructicosa</i> leaves	MIC = 20% [56]
	Aqueous extract	<i>M. spicata</i> leaves and stems	MIC = 5% [37]
		<i>A. sativum</i> leaves	MIC = 5000 µg·mL ⁻¹ [38]

* In these studies, only the most active extracts have been included in the comparison table. IR: inhibition rate; MIC: minimum inhibitory concentration; IC₅₀: half-maximal inhibitory concentration; n.a.: no activity at the highest concentration tested; n.s.: not specified.

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