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Supplementary Table

Table 1. Antibacterial and anti-inflammatory activities of Eastern and Southern African plants

Plant species	Activity	Extract	Plant part	Model	Effect	References
Asparagus africanus	Antibacterial	Ethanol	Leaves	Broth microdilution	Showed activities against <i>Enterococcus faecalis</i> (Ef) with minimum inhibitory concentration (MIC) value of 512.0 µg/ml	(116)
		80% ethanol, dichloromethane, petroleum and water	Leaves	Broth microdilution	Showed activities against <i>Klebsiella pneumonia</i> (Kp) and <i>Staphylococcus aureus</i> (Sa) with MIC values ranging from 1.6 to 12.5 mg/mL	(117)
	Anti-inflammatory	Ethanol and water	Leaves	Cyclooxygenase-2 (COX-2) inhibition	Showed moderate inhibition of 50.6% and 56.6%	(118]
Achyranthes aspera	Antibacterial	Chloroform, ethanol, ethyl acetate, methanol and petroleum ether	Leaves and stems	Disk diffusion	Showed activities against Ef, <i>Proteus mirabilis</i> (Pm) and <i>Pseudomonas aeruginosa</i> (Pa) with zone of inhibition ranging from 6.0 to 22.0 mm	(119)
		Methanol	Leaves	Microdilution	Showed activities against <i>Escherichia coli</i> (Ec), Kp, Pa, Sa and <i>Streptococcus pyogenes</i> (Sp) with MIC and minimum bactericidal concentration (MBC) values ranging from 42.0 to >200.0 mg/mL	(120)
	Anti-inflammatory	Chloroform, crude, ethyl acetate, methanol, n-butanol, n-hexane and water	Leaves	Lipoxygenase inhibition	Showed activities with inhibition and half maximal inhibitory concentration (IC $_{50}$) values ranging from 69.0 to 127.0% and 76.0 to 194.0 $\mu g/ml$, respectively	(121)
Acalypha ornata	Antibacterial	Methanol and water	Leaves	Agar dilution	Showed activities against Ec, Kp, Pm and Pa with MIC values ranging from 2.0 to 52.0 mg/ml	(122)
Burkea africana	Antibacterial	Methanol and water	Bark	Broth microdilution	Showed activities against Sa and <i>Staphylococcus epidermidis</i> (Se) with MIC values ranging from 2.5 to 6.8 mg/ml	(123)
	Anti-inflammatory	Acetone	Leaves	Nitric oxide production in LPS-activated RAW 264.7 macrophages	Showed 92.1% inhibition	(124)
		Acetone	Leaves	15-lipoxygenase (LOX) inhibitory assay	Showed 85.0% inhibition and IC $_{50}$ value of 13.5 $\mu g/ml$	(124)
	Antibacterial	Dichloromethane: methanol and water	Leaves	Microdilution assay	Showed activities against Sa, <i>Brevibacillus agri</i> (Ba), <i>Cutibacterium acnes</i> (Ca), Pa and Se with MIC values ranging from 0.5 to >16.0 mg/ml	(125)
Boophone distica	Anti-inflammatory	Hexane, methanol and water	Leaves	Cyclooxygenase bioassay	Showed inhibition ranging from 55.0% to 65.0%	(126)
		Ethanol	Bulb	Cyclooxygenase bioassay	Showed inhibition of 55.0%	(127)
Brunsvigia grandiflora	Antibacterial	80% ethanol, dichloromethane, petroleum ether and water	Leaves	Broth microdilution	Showed activities against Kp and Sa with MIC values ranging from 3.1 to 12.5 mg/ $$ mL	(117)
	Anti-inflammatory	Dichloromethane	Bulb	COX-2 inhibition	Showed moderate inhibition of 42.5%	(118)
Colophospermum	Antibacterial	Ethanol Bark and leaves Disc-agar diffusion Showed activities against <i>Bacill</i> ranging from 8.0 to 14.0 mm	Showed activities against <i>Bacillus subtillis</i> (Bs), Pa and Sa with zone of inhibition ranging from 8.0 to 14.0 mm	(128)		
mopane		Methanol and water	Bark	Broth microdilution	Showed activities against Ec and Sa with MIC values ranging from 5.0 to 8.0 mg/ml	(129)
		Acetone, dichloromethane, ethyl acetate, hexane and methanol	Leaves	Microbroth dilution	Showed activities against Ec, Kp, Salmonella typhimurium (Sy), Shigella boydii (Sb) and Vibrio parahaemolyticus (Vp) with MIC values ranging from 0.04 to 2.5 mg/mL	(130)
Dichrostachys cinerea	Antibacterial	Dichloromethane: methanol and water	Twigs	Microdilution assay	Showed activities against Ba, Brevibacterium linens (Bl), Ca, Ec, Pa, Sa and Se with MIC values ranging from 0.2 to $>8000.0~\mu g/ml$	(131)
		Methanol and water	Roots	Broth microdilution	Showed activities against Ec and Sa with MIC values ranging from 8.0 to 10.0 mg/ml	(129)
	Anti-inflammatory	Ethanol and water	Leaves	Cyclooxygenase assay	Showed 100.0% inhibition	(132)
Datura stramonium	Antibacterial	Methanol	Aerial parts	Disk diffusion	Showed activities against Bs, Ef and Sa with inhibition zone ranging from 7.0 to	(133)

					11.0 mm	
		Methanol and water	Leaves	Disk diffusion	Showed activities against Sp with MBC values of 62.5 and 250.0 mg/mL	(134)
		Methanol and water	Roots and stems	Agar diffusion	Showed activities against <i>Bacillus cereus</i> (Bc), Bs, Ec, Pa, Pm, <i>Proteus vulgaris</i> (Pv), <i>Salmonella typhi</i> (St), Sa, Sp and <i>Shigella</i> spp. with MIC values ranging from 1.0 to 3.5 mg/ml	(135)
		Ethanol	Leaves	Cyclooxygenase assay	Showed 99.0% inhibition	(132)
	Anti-inflammatory	Acetone, ethanol, hexane, methanol and water	Leaves	15-LOX inhibitory	Showed activities with IC $_{50}$ values ranging from 8.7 to >100.0 $\mu g/ml$	(136)
Helichrysum appendiculatum	Antibacterial	Chloroform : methanol	Leaves and stems	Microdilution assay	Showed activities against Bc with MIC value of 4.0 mg/ml	(137)
Helichrysum foetidum	Antibacterial	Chloroform : methanol	Leaves and stems	Microdilution assay	Showed activities against Bc and Sa with MIC values of 0.01 and 0.5 mg/ml, respectively	(137)
Helichrysum longifolium	Antibacterial	Acetone, chloroform, ethyl acetate, methanol and water	Leaves	Microdilution assay	Showed activities against <i>Acinetobacter calcoaceticus anitratus</i> (Aa), Bc, <i>Bacillus pumilus</i> (Bp), <i>Kocuria kristinae</i> (Kk), Pa, Pv, Sa, <i>Salmonella spp.</i> and <i>Shigella flexineri</i> (Sf) with MIC values ranging from 0.5 to 5.0 mg/ml	(138)
	Antibacterial	Chloroform : methanol	Leaves and stems	Microdilution assay	Showed activities against Bc with MIC value of 4.0 mg/ml	(137)
Helichrysum nudifolium	Anti-inflammatory	Ethanol	Leaves	Cyclooxygenase bioassay	Showed inhibition of 96.0%	(127)
Helichrysum pedunculatum	Antibacterial	Acetone and water	Leaves	Microdilution assay	Showed activities against Bc, Ef, Kk, Pv, Sa and Se with MIC values ranging from 0.5 to 35.0 mg/ml	(139)
		Dichloromethane and water	Leaves	Microdilution assay	Showed activities against Bc, Bp, Bs, Enterobacter cloacae (El), Kk, Sa and Serratia marcescens (Sr) with MIC values ranging from 10.0 to 100.0 mg/ml	(84)
	Anti-inflammatory	Water	Leaves	Adenosine and opiate receptor binding assays	Showed activities on both adenosine and opiate receptors with >70.0% inhibition	(21)
	Antibacterial	Methanol	Leaves	Microdilution	Showed activities against Kp, Mc, Ms and Sa with MIC values ranging from 0.1 to 0.4 $\mbox{mg/ml}$	(140)
		Dichloromethane: methanol and water	Leaves and roots	Microdilution	Showed activities against Ec, Ef, Pa and Sa with MIC values ranging from 0.3 to 16.0 mg/ml	(141)
		Dichloromethane: methanol and water	Twigs	Microdilution assay	Showed activities against Ba, Bl, Ca, Ec, Pa, Sa and Se with MIC values ranging from 20.0 to >8000.0 $\mu g/ml$	(131)
Lippia javanica	Anti-inflammatory	Acetone	Leaves	LOX inhibitory assay	Showed 70.0% inhibition and IC ₅₀ value of 3.7 μg/ml	(124)
		Acetone	Leaves	Nitric oxide production in LPS-activated RAW 264.7 macrophages	Showed 97.5% inhibition	(124)
		Ethanol and water	Leaves	Cyclooxygenase bioassay	Showed inhibition of 50.0 and 53.0%	(127)
		Ecetone and water	Leaves	Protein denaturation	Showed activities with IC50 value of 0.3 mg/mL	(142)
Maesa lanceolata	Antibacterial	Acetone	Leaves	Microdilution	Showed activities against Bc, Ec, Ef, Pa, Sa and Sy with MIC values ranging from 0.04 to 0.2 mg/ml	(143)
		Acetone	Leaves	Microdilution	Showed activities against Ec, Ef, Pa and Sa with MIC values ranging from 0.02 to 0.08 mg/ml	(144)
		Dichloromethane, 70% ethanol, petroleum ether and water	Leaves	Microdilution	Showed activities against Ec, Sa and Sf with MIC values ranging from 0.01 to 6.3 mg/ml	(145)
	Anti-inflammatory	Acetone	Leaves	Nitric oxide production in LPS-activated RAW 264.7 macrophages	Showed 99.2% inhibition	(146)
		Dichloromethane, 70% ethanol, petroleum ether and water	Leaves	COX-1 and COX-2 inhibition	Showed activities with 99.0% as the highest inhibition	(145)
Ptaeroxylon obliquum	Antibacterial	Acetone, chloroform, ethanol and methanol	Leaves	Microdilution	Showed activities against Ec, Pa, <i>Pseudomonas mirabilis</i> (Ps), Pv, Sa, <i>Shigella sonnei</i> (Ss) and <i>Streptococcus pneumoniae</i> (Sp) with MIC values ranging from 4.0 to 128.0 µg/mL	(92)
		Chloroform, <i>n</i> -hexane, 30%	Leaves	Microdilution	Showed activities against Ec, Ef, Pa and Sa with MIC values ranging from 40.0 to	(147)

		methanol : water, <i>n</i> -butanol and water			2500.0 μg/mL	
		Methanol	Leaves	Microdilution	Showed activities against Bc, Bp, Ec, Ef, Kp and Sa with MIC values ranging from 0.5 to 5.0 mg/ml	(148)
Ricinus communis	Antibacterial	Crude, chloroform, ethyl acetate, <i>n</i> -butanol and <i>n</i> -hexane	Aerial parts	Microdilution	Showed activities against Bs, Ec, Sa and Sf with MIC values ranging from 0.2 to 2.5 $\mu g/ml$	(149)
		Acetone, chloroform, ethanol and methanol	Leaves	Microdilution	Showed activities against Ec, Ef, Pa and Sa with MIC values ranging from 0.3 to $37.5~\mu\text{g/mL}$	(150)
		Ethanol, ethyl acetate, methanol, petroleum ether and water	Leaves	Microdilution	Showed activities against Ec, Kp, Pa and Sa with MIC values ranging from 3.1 to 25.0 mg/ml	(151)
	Anti-inflammatory	Acetone, ethanol, hexane, methanol and water	Leaves	15-LOX inhibitory	Showed activities with IC50 values ranging from 15.4 to >100.0 $\mu g/ml$	(136)
Searsia natalensis	Antibacterial	Water	Roots	Disk diffusion	Showed activities against Bs, Ec and Sa with zone of inhibition ranging from 9.3 to 12.0 mm	(152)
		Methanol	Roots	Broth microdilution	Showed activities against Pa and Sa with MIC value of 6.3 mg/ml	(153)
Triumfetta rhomboidea	Antibacterial	Ethanol and ether	Leaves	Disk diffusion	Showed activities against Bc, Ec, Ef, Kp, Pa and Sa with zone of inhibition ranging from 2.0 to 39.1 mm	(154)
		Methanol	Leaves	Agar dilution	Showed activities against Kp, Sa and St with MIC values ranging from 0.2 to 2.0 mg/ml	(155)
,	Anti-inflammatory	70% methanol	Leaves	Membrane stabilizing	Showed 34% membrane stabilizing effect	(156)
		70% methanol	Leaves	Protein denaturation	Showed 208% of protein denaturation effect	(156)
		Ethanol	Roots	COX-1 inhibition	Showed an inhibitory effect of 100%	(157)
Vachellia nilotica	Antibacterial	Chloroform and methanol	Bark and stem	Agar well diffusion	Showed activities against Bs, Ec, <i>Pseudomonas flurorescens</i> (Pf) and Sa with zone of inhibition ranging from 6.0 to 22.0 mm	(158)
		Methanol	Fruits	Agar diffusion	Showed activities against Bc, Ec, Kp, <i>Listeria monocytogenes</i> (Lm), Pa, Sf and St with zone of inhibition ranging from 12.0 to 39.0 mm	(159)
		Ethanol, ethyl acetate and water	Bark, leaves and roots	Micro-dilution	Showed activities against Bs, Ec, Kp, , <i>Micrococcus luteus</i> (Ml) and Sa with MIC values ranging from 0.1 to >12.5 mg/ml	(160)
	Anti-inflammatory	Ethanol, ethyl acetate and water	Bark, leaves and roots	COX-1 and COX-2 inhibition	Showed activities with inhibition ranging from 87.0% to 97.0%	(160)