

Table S1: Pre-screening results of the *in vitro* antibacterial trials at 256 µg/mL (library screen)

		Inhibition [%] ≥ 40										
Plant species	Extract ID	<i>S. aureus</i> DSM 1104	<i>S. aureus</i> DSM 18827	<i>A. baumannii</i> DSM 102929	<i>E. cloacae</i> DSM 30054	<i>K. pneumoniae</i> DSM 16609	<i>P. aeruginosa</i> DSM 1117	<i>E. faecium</i> DSM 13590	<i>E. coli</i> DSM 498	<i>E. coli</i> DSM 15076	<i>S. maltophilia</i> DSM 50170	<i>S. enterica</i> subsp. <i>enterica</i> DSM 11320
<i>C. parasitica</i>	mwE087	-	-	-	-	-	-	-	-	-	-	-
	eE087	-	-	-	-	-	-	-	+	-	-	-
	hE087	-	-	-	-	-	-	-	+	+	-	-
<i>K. anthotheca</i>	mwE088	-	-	+	-	-	-	+	+	+	+	-
	eE088	-	-	-	-	-	-	+	+	+	-	-
	hE088	-	-	-	-	-	-	+	-	+	-	+
<i>S. myrtina</i>	mwE089a	-	-	-	-	-	-	-	+	+	-	-
	eE089a	-	-	-	-	-	-	+	+	+	-	-
	hE089a	-	-	-	-	-	-	-	+	-	-	-
	mwE089b	-	-	-	-	-	-	-	-	+	-	-
	eE089b	-	-	+	-	-	-	+	+	+	-	-
	hE089b	-	+	-	-	-	-	-	-	+	-	-
<i>W. elongata</i>	mwE090	-	-	-	-	-	-	-	-	+	-	-
	eE090	-	-	-	-	-	-	+	+	+	-	-
	hE090	-	-	-	-	-	-	-	-	-	-	-
<i>C. patens</i>	mwE091	-	-	-	-	-	-	-	-	+	-	-
	eE091	+	-	+	-	-	-	+	+	+	+	+
	hE091	-	-	-	-	-	-	+	-	+	-	-
<i>A. boonei</i>	mwE092a	-	-	-	-	-	-	-	-	+	-	-
	eE092a	-	-	-	-	-	-	-	-	-	-	-
	hE092a	-	-	+	-	-	-	-	-	-	-	-
	mwE092b	-	-	-	-	-	-	-	+	+	-	-
	eE092b	+	-	+	-	-	-	+	+	+	-	-
	hE092b	+	+	-	-	-	-	+	+	+	-	+
<i>F. exasperata</i>	mwE093a	-	-	-	-	-	-	-	-	+	-	-
	eE093a	-	-	-	-	-	-	+	+	+	-	-
	hE093a	-	-	-	-	-	-	+	-	-	-	-
	mwE093b	-	-	-	-	-	-	-	-	+	-	-
	eE093b	-	-	-	-	-	-	-	-	-	-	-
	hE093b	-	-	-	-	-	-	-	+	+	-	-
<i>M. leucantha</i>	mwE094	-	-	-	-	-	-	-	-	+	-	-
	eE094	-	-	-	-	-	-	-	+	+	-	-
	hE094	-	-	+	-	-	-	-	-	+	-	-
<i>D. dewevrei</i>	mwE095	-	-	+	-	-	-	-	+	+	+	-
	eE095	-	-	-	-	-	-	-	+	+	-	-
	hE095	-	-	-	-	-	-	-	-	+	-	-
<i>C. alexandri</i>	mwE096	+	-	+	-	-	-	-	-	+	+	-
	eE096	-	-	-	-	-	-	-	+	+	-	-
	hE096	-	-	-	-	-	-	-	+	+	-	-
<i>F. variifolia</i>	mwE097	-	-	-	-	-	-	-	-	-	-	-
	eE097	-	-	-	-	-	-	+	+	+	-	-
	hE097	-	-	-	-	-	-	-	+	+	-	-
<i>S. guineense</i>	mwE098a	+	+	+	+	-	+	-	+	+	+	-
	eE098a	-	+	+	+	-	-	-	+	+	+	-
	hE098a	-	-	-	-	-	-	-	-	+	-	-
	mwE098b	+	+	+	+	-	-	-	+	+	+	-
	eE098b	-	+	+	+	-	-	-	-	+	+	-
	hE098b	-	-	+	+	-	-	-	+	+	+	-
<i>A. polystachius</i>	mwE099	-	-	-	-	-	-	-	-	-	-	-
	eE099	-	-	-	-	-	-	+	+	+	-	-
	hE099	+	-	+	-	-	-	+	+	+	-	-
+ : samples with ≥40% Inhibition - : samples with <40% Inhibition												

Table S2: IC₅₀ and MIC values with standard deviations obtained from *in vitro* dose-response assays

	Gram	+				+				-				-				-			
Scientific name	Extract ID	<i>S. aureus</i> DSM 1104				<i>S. aureus</i> DSM 18827				<i>A. baumannii</i> DSM 102929				<i>E. cloacae</i> DSM 30054				<i>P. aeruginosa</i> DSM 1117			
		IC ₅₀	s	MIC	s	IC ₅₀	s	IC ₅₀	s	IC ₅₀	s	MIC	s	IC ₅₀	s	MIC	s	IC ₅₀	s	MIC	s
<i>C. parasitica</i>	eE087 hE087	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>K. anotheca</i>	mwE088 eE088 hE088	-	-	-	-	-	-	-	-	>256	-	>256	-	-	-	-	-	-	-	-	-
<i>S. myrtina</i>	mwE089a eE089a hE089a mwE089b eE089b hE089b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>W. elongata</i>	mwE090 eE090	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>C. patens</i>	mwE091 eE091 hE091	-	-	-	-	-	-	-	-	>256	-	>256	-	-	-	-	-	-	-	-	-
<i>A. boonei</i>	mwE092a hE092a mwE092b eE092b hE092b	-	-	-	-	-	-	-	-	>256	-	>256	-	-	-	-	-	-	-	-	-
<i>F. exasperata</i>	mwE093a eE093a hE093a mwE093b hE093b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>M. leucantha</i>	mwE094 eE094 hE094	-	-	-	-	-	-	-	-	>256	-	>256	-	-	-	-	-	-	-	-	-
<i>D. dewevrei</i>	mwE095 eE095 hE095	-	-	-	-	-	-	-	-	>256	-	>256	-	-	-	-	-	-	-	-	-
<i>C. alexandri</i>	mwE096 eE096 hE096	>256	-	>256	-	-	-	-	-	>256	-	>256	-	-	-	-	-	-	-	-	-
<i>F. variifolia</i>	eE097 hE097	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>S. guineense</i>	mwE098a eE098a hE098a mwE098b eE098b hE098b	>256	-	>256	-	>256	-	>256	-	64	1.1	>256	-	128	0.6	>256	-	64	1.9	>256	-
<i>A. polystachius</i>	eE099 hE099	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vancomycin		<1	-	2	0	<1	-	1	1.8	>64	-	>64	-	>64	-	>64	-	>64	-	>64	-
Gentamicin		0.125	-	0.25	-	0.5	0.9	1	0.1	>64	-	>64	-	n.t.				n.t.			
Ciprofloxacin		n.t.				n.t.				>64	-	>64	-	n.t.				n.t.			
Tetracyclin		n.t.				n.t.				1	9.4	2	1	n.t.				n.t.			
Chloramphenicol		2	0.6	8	0.3	4	1.1	16	0.8	32	1.3	64	0.9	2	1.7	4	8.1	32	0.3	>64	-

NB: Only extracts showing growth inhibition ≥40% in the library screen at 256 µg/mL are listed. IC₅₀ and MIC values are expressed as concentration (µg/mL).

s: standard deviation. **n.t.:** not tested

Table S2: Continued

Scientific name	Gram	+				-				-				-				-			
		<i>E. faecium</i> DSM 13590				<i>E. coli</i> DSM 498				<i>E. coli</i> DSM 1576				<i>S. maltophilia</i> DSM 50170				<i>S. enterica</i> subsp. <i>enterica</i> DSM 11320			
		IC ₅₀	s	MIC	s	IC ₅₀	s	MIC	s	IC ₅₀	s	MIC	s	IC ₅₀	s	MIC	s	IC ₅₀	s	MIC	s
<i>C. parasitica</i>	eE087 hE087	-	-	-	-	>256	-	>256	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>K. anthotheca</i>	mwE088	16	3.7	32	2.3	>256	-	>256	-	16	1.4	256	0.3	64	4.4	>256	-	-	-	-	-
	eE088	64	1.8	64	1.8	>256	-	>256	-	64	0.9	>256	-	-	-	-	-	-	-	-	-
	hE088	64	8.4	128	5	-	-	-	-	64	5.7	>256	-	-	-	-	-	256	5.5	>256	-
<i>S. myrtina</i>	mwE089a	-	-	-	-	>256	-	>256	-	128	2.8	>256	-	-	-	-	-	-	-	-	-
	eE089a	64	2.1	>256	-	>256	-	>256	-	256	2.1	>256	-	-	-	-	-	-	-	-	-
	hE089a	-	-	-	-	>256	-	>256	-	-	-	-	-	-	-	-	-	-	-	-	-
	mwE089b	-	-	-	-	-	-	-	-	256	0.2	>256	-	-	-	-	-	-	-	-	-
	eE089b	128	5.8	>256	-	>256	-	>256	-	256	0.8	>256	-	-	-	-	-	-	-	-	-
<i>W. elongata</i>	hE089b	-	-	-	-	-	-	-	-	256	1.3	>256	-	-	-	-	-	-	-	-	-
<i>C. patens</i>	mwE090	-	-	-	-	-	-	-	-	128	0.3	>256	-	-	-	-	-	-	-	-	-
	eE090	64	1.3	128	3.4	>256	-	>256	-	256	1.4	>256	-	-	-	-	-	-	-	-	-
	hE091	-	-	-	-	-	-	-	-	128	2.2	>256	-	-	-	-	-	-	-	-	-
<i>A. boonei</i>	mwE091	-	-	-	-	-	-	-	-	128	2.2	>256	-	-	-	-	-	-	-	-	-
	eE091	64	0.9	64	0.9	>256	-	>256	-	128	18.1	>256	-	256	0.7	>256	-	>256	-	>256	-
	hE091	64	2.2	>256	-	-	-	-	-	128	2.2	>256	-	-	-	-	-	-	-	-	-
	mwE092a	-	-	-	-	-	-	-	-	128	1.3	>256	-	-	-	-	-	-	-	-	-
	hE092a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>F. exasperata</i>	mwE092b	-	-	-	-	256	2.1	>256	-	32	3.1	>256	-	-	-	-	-	-	-	-	-
	eE092b	16	1.2	64	1.6	>256	-	>256	-	128	8.9	>256	-	-	-	-	-	-	-	-	-
	hE092b	16	3.1	>256	-	>256	-	>256	-	256	0.4	>256	-	-	-	-	-	256	5.3	256	5.3
	hE092b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>F. exasperata</i>	mwE093a	-	-	-	-	-	-	-	-	128	1.4	>256	-	-	-	-	-	-	-	-	-
	eE093a	32	0.1	128	7.5	>256	-	>256	-	128	3.0	>256	-	-	-	-	-	-	-	-	-
	hE093a	32	4.1	>256	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	mwE093b	-	-	-	-	-	-	-	-	256	1.0	>256	-	-	-	-	-	-	-	-	-
	hE093b	-	-	-	-	>256	-	>256	-	256	2.2	>256	-	-	-	-	-	-	-	-	-
<i>M. leucantha</i>	mwE094	-	-	-	-	-	-	-	-	128	5.0	-	-	-	-	-	-	-	-	-	-
	eE094	-	-	-	-	>256	-	>256	-	256	3.3	>256	-	-	-	-	-	-	-	-	-
	hE094	-	-	-	-	-	-	-	-	256	1.4	>256	-	-	-	-	-	-	-	-	-
<i>D. dewevrei</i>	mwE095	-	-	-	-	>256	-	>256	-	256	2.1	>256	-	256	0.8	>256	-	-	-	-	-
	eE095	-	-	-	-	>256	-	>256	-	256	3.4	>256	-	-	-	-	-	-	-	-	-
	hE095	-	-	-	-	-	-	-	-	>256	-	>256	-	-	-	-	-	-	-	-	-
<i>C. alexandri</i>	mwE096	-	-	-	-	-	-	-	-	256	0.6	>256	-	256	2.2	>256	-	-	-	-	-
	eE096	-	-	-	-	>256	-	>256	-	256	3.9	>256	-	-	-	-	-	-	-	-	-
	hE096	-	-	-	-	>256	-	>256	-	256	1.9	>256	-	-	-	-	-	-	-	-	-
<i>F. variifolia</i>	eE097	64	2.5	>256	-	>256	-	>256	-	256	0.4	>256	-	-	-	-	-	-	-	-	-
	hE097	-	-	-	-	>256	-	>256	-	256	0.6	>256	-	-	-	-	-	-	-	-	-
<i>S. guineense</i>	mwE098a	-	-	-	-	>256	-	>256	-	64	2.7	>256	-	32	0.3	256	1.0	-	-	-	-
	eE098a	-	-	-	-	>256	-	>256	-	128	4.7	>256	-	64	0.8	256	4.1	-	-	-	-
	hE098a	-	-	-	-	-	-	-	-	128	1.4	>256	-	-	-	-	-	-	-	-	-
	mwE098b	-	-	-	-	128	0.2	>256	-	32	5.1	128	0.7	32	0.5	>256	-	-	-	-	-
	eE098b	-	-	-	-	>256	-	>256	-	128	2.6	256	2	128	2.7	>256	-	-	-	-	-
<i>A. polystachius</i>	hE098b	-	-	-	-	-	-	-	-	256	1	>256	-	128	0.8	>256	-	-	-	-	-
	hE099	128	7.5	256	7.1	>256	-	>256	-	256	1.5	>256	-	-	-	-	-	-	-	-	-
	hE099	32	7.6	128	7.9	>256	-	>256	-	256	1.0	>256	-	-	-	-	-	-	-	-	-
Vancomycin		>64	-	>64	-	n.t.				n.t.				n.t.				n.t.			
Gentamicin		8	2.3	>64	-	<1	-	1	3.9	n.t.				8	0.3	8	0.3	n.t.			
Ciprofloxacin		n.t.				n.t.				n.t.				n.t.				n.t.			
Tetracyclin		n.t.				<1	-	2	0.5	n.t.				n.t.				1	1.4	2	0.4
Chloramphenicol		-	2	4	0.8	n.t.				<1	-	4	0.1	n.t.				4	6.8	8	5.5

NB: Only extracts showing growth inhibition $\geq 40\%$ in the library screen at 256 $\mu\text{g/mL}$ are listed. IC₅₀ and MIC values are expressed as concentration ($\mu\text{g/mL}$).

s: standard deviation. n.t.: not tested

Table S3: Summary of COX-2 and antibacterial results across species

			LIBRARY SCREEN ACTIVITY:				≤256µg/mL
Plant Species	Plant Part	Extract ID	COX-2 [50µg/mL]	Antibacterial Library Screen	Number of active extracts on antibacterial library screen	Number of strains that extracts were active against on library screen	Number of strains each extract was active against on dose-response assays (≤256µg/mL)
<i>C. parasitica</i>	whole plant	mwE087	+	-	2	0	0
		eE087	+	+		1	nt
		hE087	+	+		2	1
<i>K. anthotheca</i>	bark	mwE088	+	+	3	5	3
		eE088	+	+		3	2
		hE088	+	+		3	3
<i>S. myrtina</i>	dead wood	mwE089a	-	+	6	2	1
		eE089a	+	+		3	2
		hE089a	+	+		1	0
	stripped wood	mwE089b	+	+		1	1
		eE089b	+	+		4	2
		hE089b	-	+		3	2
<i>W. elongata</i>	leaves	mwE090	+	+	2	1	1
		eE090	+	+		3	2
		hE090	+	-		0	nt
<i>C. patens</i>	dead wood	mwE091	+	+	3	1	1
		eE091	+	+		7	4
		hE091	-	+		2	2
<i>A. boonei</i>	bark	mwE092a	-	+	5	1	1
		eE092a	-	-		0	nt
		hE092a	+	+		1	0
	dead wood	mwE092b	+	+		2	2
		eE092b	+	+		5	3
		hE092b	+	+		6	5
<i>F. exasperata</i>	bark	mwE093a	+	+	5	1	1
		eE093a	+	+		3	2
		hE093a	+	+		1	1
	leaves	mwE093b	+	+		1	1
		eE093b	+	-		0	nt
		hE093b	+	+		2	1
<i>M. leucantha</i>	pith	mwE094	+	+	3	1	1
		eE094	+	+		2	1
		hE094	+	+		2	1
<i>D. dewevrei</i>	bark	mwE095	+	+	3	4	2
		eE095	+	+		2	1
		hE095	+	+		1	0
<i>C. alexandri</i>	bark	mwE096	-	+	3	4	2
		eE096	-	+		2	1
		hE096	+	+		2	1
<i>F. variifolia</i>	bark	mwE097	+	-	2	0	nt
		eE097	+	+		3	2
		hE097	+	+		2	1
<i>S. guineense</i>	bark	mwE098a	+	+	6	8	5
		eE098a	+	+		6	4
		hE098a	+	+		1	1
	leaves	mwE098b	-	+		7	6
		eE098b	+	+		5	3
		hE098b	+	+		5	2
<i>A. polystachius</i>	pith	mwE099	+	-	2	0	nt
		eE099	+	+		3	2
		hE099	+	+		5	3
		Total	43	45			

Table S4: Results from the COX-2 inhibition library screen at descending concentrations

Extract ID	Plant Species	Plant Part	Type of Extract	COX-2 Inhibition ≥ 50 %		
				50 $\mu\text{g/ml}$	10 $\mu\text{g/ml}$	5 $\mu\text{g/ml}$
mwE087	<i>C. parasitica</i>	whole plant	methanol/water (9:1, v/v)	+	+	+
eE087			ethyl acetate	+	+	+
hE087			<i>n</i> -hexane	+	+	+
mwE088	<i>K. anthotheca</i>	stem bark and resin	methanol/water (9:1, v/v)	+	+	+
eE088			ethyl acetate	+	+	+
hE088			<i>n</i> -hexane	+	+	+
mwE089a	<i>S. myrtina</i>	strips of stem bark (refuse)	methanol/water (9:1, v/v)	-	-	-
eE089a			ethyl acetate	+	-	-
hE089a			<i>n</i> -hexane	+	+	+
mwE089b		stem bark	methanol/water (9:1, v/v)	+	-	-
eE089b			ethyl acetate	+	+	-
hE089b			<i>n</i> -hexane	-	-	-
mwE090	<i>W. elongata</i>	leaves	methanol/water (9:1, v/v)	+	-	-
eE090			ethyl acetate	+	-	-
hE090			<i>n</i> -hexane	+	-	-
mwE091	<i>C. patens</i>	dead wood	methanol/water (9:1, v/v)	+	-	-
eE091			ethyl acetate	+	-	-
hE091			<i>n</i> -hexane	-	-	-
mwE092a	<i>A. boonei</i>	stem bark	methanol/water (9:1, v/v)	-	-	-
eE092a			ethyl acetate	-	-	-
hE092a			<i>n</i> -hexane	+	-	-
mwE092b		dead wood	methanol/water (9:1, v/v)	+	-	-
eE092b			ethyl acetate	+	-	-
hE092b			<i>n</i> -hexane	+	+	+
mwE093a	<i>F. exasperata</i>	stem bark	methanol/water (9:1, v/v)	+	-	-
eE093a			ethyl acetate	+	+	+
hE093a			<i>n</i> -hexane	+	+	+
mwE093b		leaves	methanol/water (9:1, v/v)	+	-	-
eE093b			ethyl acetate	+	+	-
hE093b			<i>n</i> -hexane	+	+	-
mwE094	<i>M. leucantha</i>	pith	methanol/water (9:1, v/v)	+	-	-
eE094			ethyl acetate	+	-	-
hE094			<i>n</i> -hexane	+	+	+
mwE095	<i>D. dewevrei</i>	stem bark	methanol/water (9:1, v/v)	+	-	-
eE095			ethyl acetate	+	-	-
hE095			<i>n</i> -hexane	+	-	-
mwE096	<i>C. alexandri</i>	stem bark	methanol/water (9:1, v/v)	-	-	-
eE096			ethyl acetate	-	-	-
hE096			<i>n</i> -hexane	+	+	+
mwE097	<i>F. variifolia</i>	stem bark	methanol/water (9:1, v/v)	+	-	-
eE097			ethyl acetate	+	+	+
hE097			<i>n</i> -hexane	+	+	+
mwE098a	<i>S. guineense</i>	stem bark	methanol/water (9:1, v/v)	+	-	-
eE098a			ethyl acetate	+	-	-
hE098a			<i>n</i> -hexane	+	+	+
mwE098b		leaves	methanol/water (9:1, v/v)	-	-	-
eE098b			ethyl acetate	+	-	-
hE098b			<i>n</i> -hexane	+	-	-
mwE099	<i>A. polystachyus</i>	pith	methanol/water (9:1, v/v)	+	-	-
eE099			ethyl acetate	+	+	+
hE099			<i>n</i> -hexane	+	+	+

Table S5: Information on Strain ID for each bacteria

Scientific Name	Strain ID	Resistances	Incubation length (h)	Type of isolate
<i>Acinetobacter baumannii</i>	DSM 102929	Penicillin G, Oxacillin, Ampicillin, Ticarcillin, Mezlocillin, Cefazolin, Cefotaxime, Vancomycin, Gentamicin, Ciprofloxacin	22	clinical isolate: human, skin, thigh
<i>Enterobacter cloacae</i>	DSM 30054	Penicillin G, Oxacillin, Ampicillin, Cefazolin	18	clinical isolate: spinal fluid
<i>Enterococcus faecium</i>	DSM 13590	Penicillin G, Oxacillin, Ticarcillin, Cefazolin, Cefotaxime, Aztreonam	18	clinical isolate: human faeces, rectal swab
<i>Escherichia coli</i> K12	DSM 498	Penicillin G, Oxacillin	18	unknown
<i>Escherichia coli</i>	DSM 1576	Oxacillin, Vancomycin, Lincomycin, Bacitracin, Clindamycin, Linezolid, Nystatin, Quinupristin/Dalfopristin, Teicoplanin	18	human faeces
<i>Klebsiella pneumoniae</i>	DSM 16609	Penicillin G, Oxacillin, Ampicillin, Ticarcillin, Mezlocillin	18	blood
<i>Pseudomonas aeruginosa</i>	DSM 1117	Chloramphenicol, Vancomycin, Penicillin G, Oxacillin, Ampicillin, Cefazolin	18	clinical isolate: blood culture; Human blood
<i>Staphylococcus aureus</i>	DSM 1104	Aztreonam	18	clinical isolate: Human
<i>Staphylococcus aureus</i>	DSM 18827	Penicillin G, Oxacillin, Cefazolin, Cefotaxime, Aztreonam, Imipenem	18	clinical isolate: tracheal secret; 65-year-old male
<i>Stenotrophomonas maltophilia</i>	DSM 50170 [ATCC: 13637]	Penicillin G, Oxacillin, Ampicillin, Ticarcillin, Cefalotin, Cefazolin, Aztreonam	18	clinical isolate: Oropharyngeal region of patient with mouth cancer
<i>Salmonella enterica</i> subsp. <i>enterica</i>	DSM 11320	Wildtype	18	unknown
NB: Permanent culture created in 2020; Source: Bacdiv.dsmz.de and lab data				

Table S6: List of antibiotics used

Abbreviations	Antibacterial agents
CIP	ciprofloxacin
TET	tetracycline
GEN	gentamicin
VAN	vancomycin
CHL	chloramphenicol