

The Antimicrobial Properties of Poplar and Aspen–Poplar Propolises and their Active Components Against Selected Microorganisms, Including *Helicobacter pylori*

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Table S1. Model 1 – components vs. MIC, impact of components on antibacterial activity.

Microrganism/ Component	<i>S. aureus</i> ATCC 25923	<i>S. aureus</i> ATCC 29213	<i>S. epidermidis</i> ATCC 12228	<i>E. faecalis</i> ATCC 29212	<i>M. luteus</i> ATCC 10240	<i>B. cereus</i> ATCC 10876	<i>H. pylori</i> ATCC 43504	<i>C. albicans</i> ATCC 102231	<i>C. parapsilosis</i> ATCC 22019	<i>C. glabrata</i> ATCC 90030
Caffeic acid	R=-0.053	R=0.012	R=-0.226	R=-0.313	R=-0.050	R=-0.361	R=0.061	R=-0.095	R=-0.125	R=-0.576
	<i>p</i> =0.883	<i>p</i> =0.973	<i>p</i> =0.531	<i>p</i> =0.378	<i>p</i> =0.891	<i>p</i> =0.305	<i>p</i> =0.867	<i>p</i> =0.795	<i>p</i> =0.730	<i>p</i> =0.081
<i>p</i> -Coumaric acid	R=0.871	R=0.801	R=0.923	R=0.610	R=0.855	R=0.852	R=0.728	R=0.845	R=0.869	R=0.949
	<i>p</i> =0.001	<i>p</i> =0.005	<i>p</i> =0.000	<i>p</i> =0.061	<i>p</i> =0.002	<i>p</i> =0.002	<i>p</i> =0.017	<i>p</i> =0.002	<i>p</i> =0.001	<i>p</i> =0.000
Vanillin	R=0.965	R=0.946	R=0.990	R=0.680	R=0.966	R=0.934	R=0.832	R=0.962	R=0.967	R=0.882
	<i>p</i> =0.000	<i>p</i> =0.000	<i>p</i> =0.000	<i>p</i> =0.031	<i>p</i> =0.000	<i>p</i> =0.000	<i>p</i> =0.003	<i>p</i> =0.000	<i>p</i> =0.000	<i>p</i> =0.001
Ferulic acid	R=0.842	R=0.811	R=0.840	R=0.545	R=0.852	R=0.836	R=0.669	R=0.841	R=0.859	R=0.777
	<i>p</i> =0.002	<i>p</i> =0.004	<i>p</i> =0.002	<i>p</i> =0.103	<i>p</i> =0.002	<i>p</i> =0.003	<i>p</i> =0.034	<i>p</i> =0.002	<i>p</i> =0.001	<i>p</i> =0.008
Isoferulic acid	R=-0.178	R=-0.170	R=-0.332	R=-0.325	R=-0.187	R=-0.430	R=-0.130	R=-0.257	R=-0.271	R=-0.584
	<i>p</i> =0.623	<i>p</i> =0.638	<i>p</i> =0.349	<i>p</i> =0.359	<i>p</i> =0.605	<i>p</i> =0.215	<i>p</i> =0.720	<i>p</i> =0.474	<i>p</i> =0.448	<i>p</i> =0.076
Benzoic acid	R=0.667	R=0.618	R=0.781	R=0.467	R=0.680	R=0.825	R=0.465	R=0.660	R=0.691	R=0.866
	<i>p</i> =0.035	<i>p</i> =0.057	<i>p</i> =0.008	<i>p</i> =0.174	<i>p</i> =0.031	<i>p</i> =0.003	<i>p</i> =0.176	<i>p</i> =0.038	<i>p</i> =0.027	<i>p</i> =0.001
3,4-Dimethylcaffeic acid (DMCA)	R=0.127	R=0.139	R=-0.026	R=0.013	R=0.113	R=-0.168	R=0.279	R=0.150	R=0.132	R=-0.159
	<i>p</i> =0.726	<i>p</i> =0.701	<i>p</i> =0.942	<i>p</i> =0.972	<i>p</i> =0.755	<i>p</i> =0.643	<i>p</i> =0.435	<i>p</i> =0.679	<i>p</i> =0.716	<i>p</i> =0.660
Quercetin	R=-0.354	R=-0.229	R=-0.432	R=-0.468	R=-0.342	R=-0.526	R=-0.108	R=-0.309	R=-0.352	R=-0.602
	<i>p</i> =0.316	<i>p</i> =0.525	<i>p</i> =0.213	<i>p</i> =0.173	<i>p</i> =0.334	<i>p</i> =0.119	<i>p</i> =0.766	<i>p</i> =0.386	<i>p</i> =0.319	<i>p</i> =0.065

Pinobanksin-5-methyl ether	R=-0.583	R=-0.447	R=-0.599	R=-0.728	R=-0.550	R=-0.677	R=-0.436	R=-0.537	R=-0.594	R=-0.801
	p=0.077	p=0.195	p=0.067	p=0.017	p=0.100	p=0.032	p=0.208	p=0.110	p=0.070	p=0.005
Cinnamic acid	R=0.929	R=0.944	R=0.838	R=0.571	R=0.937	R=0.755	R=0.877	R=0.931	R=0.920	R=0.590
	p=0.000	p=0.000	p=0.002	p=0.085	p=0.000	p=0.012	p=0.001	p=0.000	p=0.000	p=0.073
Quercetin-3-methyl ether	R=-0.481	R=-0.337	R=-0.548	R=-0.624	R=-0.452	R=-0.660	R=-0.244	R=-0.407	R=-0.464	R=-0.758
	p=0.159	p=0.342	p=0.101	p=0.054	p=0.189	p=0.038	p=0.497	p=0.243	p=0.177	p=0.011
Pinobanksin	R=-0.554	R=-0.454	R=-0.614	R=-0.574	R=-0.534	R=-0.621	R=-0.430	R=-0.557	R=-0.591	R=-0.798
	p=0.097	p=0.187	p=0.059	p=0.083	p=0.112	p=0.055	p=0.215	p=0.095	p=0.072	p=0.006
Apigenin	R=0.006	R=-0.063	R=0.047	R=0.092	R=0.005	R=0.122	R=-0.219	R=-0.071	R=-0.062	R=0.024
	p=0.987	p=0.862	p=0.898	p=0.801	p=0.989	p=0.738	p=0.542	p=0.845	p=0.866	p=0.947
Kempferol	R=-0.025	R=-0.078	R=-0.015	R=0.367	R=-0.052	R=0.127	R=-0.058	R=-0.071	R=-0.048	R=0.101
	p=0.946	p=0.831	p=0.968	p=0.297	p=0.887	p=0.727	p=0.874	p=0.845	p=0.895	p=0.781
Isorhamnetin	R=-0.271	R=0.324	R=-0.246	R=0.346	R=-0.289	R=-0.022	R=-0.265	R=-0.261	R=-0.234	R=0.003
	p=0.448	p=0.361	p=0.493	p=0.328	p=0.418	p=0.953	p=0.459	p=0.467	p=0.516	p=0.993
Luteolin-5-methyl ether	R=-0.505	R=-0.460	R=-0.529	R=-0.006	R=-0.487	R=-0.344	R=-0.430	R=-0.469	R=-0.483	R=-0.535
	p=0.136	p=0.181	p=0.116	p=0.987	p=0.153	p=0.330	p=0.215	p=0.172	p=0.157	p=0.111
Quercetine-5,7-dimethyl ether	R=-0.156	R=-0.163	R=-0.173	R=0.331	R=-0.164	R=-0.049	R=-0.076	R=-0.111	R=-0.111	R=-0.076
	p=0.668	p=0.653	p=0.632	p=0.350	p=0.651	p=0.894	p=0.834	p=0.761	p=0.760	p=0.834
Rhamnetin	R=-0.318	R=-0.239	R=-0.392	R=-0.279	R=-0.308	R=-0.364	R=-0.203	R=-0.326	R=-0.346	R=-0.543
	p=0.371	p=0.505	p=0.262	p=0.436	p=0.387	p=0.301	p=0.574	p=0.359	p=0.328	p=0.105
Quercetin-dimethyl ether	R=-0.243	R=-0.197	R=-0.303	R=0.004	R=-0.242	R=-0.296	R=-0.071	R=-0.167	R=-0.192	R=-0.303
	p=0.499	p=0.585	p=0.394	p=0.991	p=0.500	p=0.407	p=0.845	p=0.645	p=0.595	p=0.395
2-Acetyl-1-caffeoyl-3- <i>p</i> -coumaroylglycerol	R=0.485	R=0.442	R=0.453	R=0.115	R=0.483	R=0.384	R=0.365	R=0.483	R=0.504	R=0.466
	p=0.156	p=0.201	p=0.188	p=0.752	p=0.157	p=0.274	p=0.300	p=0.157	p=0.138	p=0.175
Quercetin-dimethyl ether	R=-0.465	R=-0.364	R=-0.504	R=-0.499	R=-0.450	R=-0.609	R=-0.266	R=-0.397	R=-0.443	R=-0.625
	p=0.175	p=0.301	p=0.137	p=0.142	p=0.191	p=0.062	p=0.458	p=0.256	p=0.199	p=0.053
2-Acetyl-3-caffeoyl-1-feruloylglycerol	R=0.536	R=0.485	R=0.574	R=0.217	R=0.545	R=0.560	R=0.362	R=0.537	R=0.573	R=0.641
	p=0.110	p=0.155	p=0.083	p=0.547	p=0.103	p=0.092	p=0.305	p=0.109	p=0.083	p=0.046
Caffeic acid prenyl ester 1	R=-0.287	R=-0.297	R=-0.339	R=-0.405	R=-0.317	R=-0.438	R=-0.426	R=-0.375	R=-0.382	R=-0.520
	p=0.422	p=0.404	p=0.338	p=0.246	p=0.372	p=0.206	p=0.219	p=0.286	p=0.276	p=0.123
Chrysin	R=-0.585	R=-0.444	R=-0.663	R=-0.652	R=-0.555	R=-0.741	R=-0.315	R=-0.524	R=-0.580	R=-0.858
	p=0.076	p=0.199	p=0.037	p=0.041	p=0.096	p=0.014	p=0.375	p=0.120	p=0.079	p=0.002
Pinocembrin	R=-0.477	R=-0.381	R=-0.458	R=-0.508	R=-0.450	R=-0.416	R=-0.444	R=-0.454	R=-0.484	R=-0.545
	p=0.164	p=0.278	p=0.184	p=0.133	p=0.192	p=0.231	p=0.198	p=0.187	p=0.156	p=0.103
	R=0.056	R=-0.063	R=0.112	R=0.600	R=0.027	R=0.319	R=-0.067	R=0.023	R=0.067	R=0.387

Acacetin	$p=0.878$	$p=0.862$	$p=0.757$	$p=0.067$	$p=0.941$	$p=0.368$	$p=0.854$	$p=0.949$	$p=0.854$	$p=0.269$
Caffeic acid prenyl ester 2	$R=-0.225$	$R=-0.156$	$R=-0.255$	$R=-0.214$	$R=-0.215$	$R=-0.336$	$R=-0.047$	$R=-0.143$	$R=-0.178$	$R=-0.298$
Pinocembrin chalcone	$p=0.532$	$p=0.668$	$p=0.478$	$p=0.553$	$p=0.550$	$p=0.343$	$p=0.897$	$p=0.694$	$p=0.622$	$p=0.403$
*Caffeic acid prenyl ester 3	$R=-0.225$	$R=-0.156$	$R=-0.255$	$R=-0.214$	$R=-0.215$	$R=-0.336$	$R=-0.047$	$R=-0.143$	$R=-0.178$	$R=-0.298$
	$p=0.532$	$p=0.668$	$p=0.478$	$p=0.553$	$p=0.550$	$p=0.343$	$p=0.897$	$p=0.694$	$p=0.622$	$p=0.403$
	$R=-0.288$	$R=-0.269$	$R=-0.399$	$R=-0.393$	$R=-0.306$	$R=-0.579$	$R=-0.069$	$R=-0.285$	$R=-0.305$	$R=-0.476$
*Caffeic acid benzyl ester	$p=0.420$	$p=0.452$	$p=0.254$	$p=0.261$	$p=0.390$	$p=0.080$	$p=0.851$	$p=0.425$	$p=0.392$	$p=0.165$
	$R=0.153$	$R=0.184$	$R=0.021$	$R=-0.179$	$R=0.155$	$R=-0.071$	$R=0.161$	$R=0.114$	$R=0.106$	$R=-0.214$
	$p=0.673$	$p=0.610$	$p=0.955$	$p=0.620$	$p=0.668$	$p=0.846$	$p=0.657$	$p=0.755$	$p=0.771$	$p=0.553$
Sakuranetin	$R=-0.011$	$R=-0.110$	$R=0.091$	$R=0.501$	$R=-0.034$	$R=0.281$	$R=-0.111$	$R=-0.018$	$R=0.018$	$R=0.401$
	$p=0.976$	$p=0.763$	$p=0.803$	$p=0.141$	$p=0.927$	$p=0.431$	$p=0.761$	$p=0.961$	$p=0.962$	$p=0.250$
Genkwanin	$R=0.054$	$R=-0.061$	$R=0.090$	$R=0.622$	$R=0.026$	$R=0.309$	$R=-0.065$	$R=0.022$	$R=0.065$	$R=0.342$
	$p=0.882$	$p=0.867$	$p=0.806$	$p=0.055$	$p=0.943$	$p=0.385$	$p=0.859$	$p=0.951$	$p=0.859$	$p=0.334$
Galangin	$R=-0.550$	$R=-0.461$	$R=-0.581$	$R=-0.712$	$R=-0.529$	$R=-0.638$	$R=-0.458$	$R=-0.564$	$R=-0.594$	$R=-0.751$
	$p=0.100$	$p=0.180$	$p=0.078$	$p=0.021$	$p=0.116$	$p=0.047$	$p=0.183$	$p=0.090$	$p=0.070$	$p=0.012$
Kaempferide	$R=0.155$	$R=0.019$	$R=0.274$	$R=0.540$	$R=0.123$	$R=0.426$	$R=-0.007$	$R=0.116$	$R=0.169$	$R=0.611$
	$p=0.670$	$p=0.959$	$p=0.444$	$p=0.108$	$p=0.736$	$p=0.220$	$p=0.984$	$p=0.749$	$p=0.640$	$p=0.061$
2-Acetyl-1,3-di- <i>p</i> -Coumaroyl glycerol	$R=0.808$	$R=0.713$	$R=0.782$	$R=0.900$	$R=0.789$	$R=0.868$	$R=0.640$	$R=0.783$	$R=0.819$	$R=0.829$
	$p=0.005$	$p=0.021$	$p=0.008$	$p=0.000$	$p=0.007$	$p=0.001$	$p=0.046$	$p=0.007$	$p=0.004$	$p=0.003$
Pinobanksin-3O-acetate	$R=-0.627$	$R=-0.516$	$R=-0.631$	$R=-0.687$	$R=-0.589$	$R=-0.617$	$R=-0.546$	$R=-0.603$	$R=-0.637$	$R=-0.775$
	$p=0.053$	$p=0.127$	$p=0.050$	$p=0.028$	$p=0.073$	$p=0.057$	$p=0.102$	$p=0.065$	$p=0.048$	$p=0.008$
Quercetin-dimethyl	$R=0.057$	$R=-0.065$	$R=0.127$	$R=0.582$	$R=0.028$	$R=0.325$	$R=-0.068$	$R=0.024$	$R=0.069$	$R=0.416$
	$p=0.875$	$p=0.859$	$p=0.726$	$p=0.077$	$p=0.939$	$p=0.359$	$p=0.851$	$p=0.948$	$p=0.851$	$p=0.232$
**2-Acetyl-3- <i>p</i> -coumaroyl-1-feruloylglycerol	$R=0.833$	$R=0.765$	$R=0.811$	$R=0.645$	$R=0.827$	$R=0.819$	$R=0.658$	$R=0.824$	$R=0.853$	$R=0.812$
	$p=0.003$	$p=0.010$	$p=0.004$	$p=0.044$	$p=0.003$	$p=0.004$	$p=0.039$	$p=0.003$	$p=0.002$	$p=0.004$

Table legend: R—square R parameter; p —Pearson's correlation parameter; *S. aureus*—*Staphylococcus aureus*; *S. epidermidis*—*Staphylococcus epidermidis*; *E. faecalis*—*Enterococcus faecalis*; *M. luteus*—*Micrococcus luteus*; *B. cereus*—*Bacillus cereus*; *H. pylori*—*Helicobacter pylori*; *C. albicans*—*Candida albicans*; *C. parapsilosis*—*Candida parapsilosis*; *C. glabrata*—*Candida glabrata*.

Table S2. Model 2—significant components vs. significant components, an analysis of connections between presence of significant components in Model 1.

Significant Component	<i>p</i> -Coumaric Acid	Vanillin e	Ferulic Acid	Benzoic Acid	Pinobanksin-5-Methyl Ether	Cinnamic Acid	Pinobanksin	2-Acetyl-3-Caffeoyl-1-Feruloylglycerol	Chrysin	Galangin	2-Acetyl-1,3-di- <i>p</i> -Coumaroylglycerol	Pinobanksin-3O-Acetate	**2-Acetyl-3- <i>p</i> -Coumaroyl-1-Feruloylglycerol
<i>p</i> -Coumaric acid	R=1.000 <i>p</i> = ---	R=0.938 <i>p</i> =0.000	R=0.839 <i>p</i> =0.002	R=0.803 <i>p</i> =0.005	R=-0.768 <i>p</i> =0.009	R=0.761 <i>p</i> =0.011	R=-0.732 <i>p</i> =0.016	R=0.679 <i>p</i> =0.031	R=-0.784 <i>p</i> =0.007	R=-0.667 <i>p</i> =0.035	R=0.819 <i>p</i> =0.004	R=-0.783 <i>p</i> =0.007	R=0.871 <i>p</i> =0.001
Vanillin	R=0.938 <i>p</i> =0.000	R=1.000 <i>p</i> = ---	R=0.870 <i>p</i> =0.001	R=0.790 <i>p</i> =0.007	R=-0.599 <i>p</i> =0.067	R=0.874 <i>p</i> =0.001	R=-0.610 <i>p</i> =0.061	R=0.616 <i>p</i> =0.058	R=-0.639 <i>p</i> =0.047	R=-0.572 <i>p</i> =0.084	R=0.776 <i>p</i> =0.008	R=-0.633 <i>p</i> =0.049	R=0.837 <i>p</i> =0.002
Ferulic acid	R=0.839 <i>p</i> =0.002	R=0.870 <i>p</i> =0.001	R=1.000 <i>p</i> = ---	R=0.873 <i>p</i> =0.001	R=-0.592 <i>p</i> =0.071	R=0.845 <i>p</i> =0.002	R=-0.531 <i>p</i> =0.114	R=0.886 <i>p</i> =0.001	R=-0.685 <i>p</i> =0.029	R=-0.440 <i>p</i> =0.203	R=0.751 <i>p</i> =0.012	R=-0.480 <i>p</i> =0.160	R=0.952 <i>p</i> =0.000
Benzoic acid	R=0.803 <i>p</i> =0.005	R=0.790 <i>p</i> =0.007	R=0.873 <i>p</i> =0.001	R=1.000 <i>p</i> = ---	R=-0.613 <i>p</i> =0.060	R=0.555 <i>p</i> =0.096	R=-0.529 <i>p</i> =0.116	R=0.814 <i>p</i> =0.004	R=-0.797 <i>p</i> =0.006	R=-0.431 <i>p</i> =0.214	R=0.672 <i>p</i> =0.033	R=-0.413 <i>p</i> =0.236	R=0.791 <i>p</i> =0.006
Pinobanksin-5-methyl ether	R=-0.768 <i>p</i> =0.009	R=-0.599 <i>p</i> =0.067	R=-0.592 <i>p</i> =0.071	R=-0.613 <i>p</i> =0.060	R=1.000 <i>p</i> = ---	R=-0.389 <i>p</i> =0.266	R=0.771 <i>p</i> =0.009	R=-0.517 <i>p</i> =0.126	R=0.928 <i>p</i> =0.000	R=0.804 <i>p</i> =0.005	R=-0.917 <i>p</i> =0.000	R=0.883 <i>p</i> =0.001	R=-0.764 <i>p</i> =0.010
Cinnamic acid	R=0.761 <i>p</i> =0.011	R=0.874 <i>p</i> =0.001	R=0.845 <i>p</i> =0.002	R=0.555 <i>p</i> =0.096	R=-0.389 <i>p</i> =0.266	R=1.000 <i>p</i> = ---	R=-0.383 <i>p</i> =0.275	R=0.577 <i>p</i> =0.081	R=-0.370 <i>p</i> =0.293	R=-0.343 <i>p</i> =0.332	R=0.642 <i>p</i> =0.046	R=-0.457 <i>p</i> =0.184	R=0.801 <i>p</i> =0.005
Pinobanksin	R=-0.732 <i>p</i> =0.016	R=-0.610 <i>p</i> =0.061	R=-0.531 <i>p</i> =0.114	R=-0.529 <i>p</i> =0.116	R=0.771 <i>p</i> =0.009	R=-0.383 <i>p</i> =0.275	R=1.000 <i>p</i> = ---	R=-0.514 <i>p</i> =0.128	R=0.701 <i>p</i> =0.024	R=0.954 <i>p</i> =0.000	R=-0.767 <i>p</i> =0.010	R=0.893 <i>p</i> =0.000	R=-0.705 <i>p</i> =0.023
2-Acetyl-3-caffeoyl-1-feruloylglycerol	R=0.679 <i>p</i> =0.031	R=0.616 <i>p</i> =0.058	R=0.886 <i>p</i> =0.001	R=0.814 <i>p</i> =0.004	R=-0.517 <i>p</i> =0.126	R=0.577 <i>p</i> =0.081	R=-0.514 <i>p</i> =0.128	R=1.000 <i>p</i> = ---	R=-0.640 <i>p</i> =0.046	R=-0.347 <i>p</i> =0.326	R=0.552 <i>p</i> =0.098	R=-0.360 <i>p</i> =0.307	R=0.855 <i>p</i> =0.002
Chrysin	R=-0.784 <i>p</i> =0.007	R=-0.639 <i>p</i> =0.047	R=-0.685 <i>p</i> =0.029	R=-0.797 <i>p</i> =0.006	R=0.928 <i>p</i> =0.000	R=-0.370 <i>p</i> =0.293	R=0.701 <i>p</i> =0.024	R=-0.640 <i>p</i> =0.046	R=1.000 <i>p</i> = ---	R=0.673 <i>p</i> =0.033	R=-0.862 <i>p</i> =0.001	R=0.722 <i>p</i> =0.018	R=-0.775 <i>p</i> =0.008
Galangin	R=-0.667 <i>p</i> =0.035	R=-0.572 <i>p</i> =0.084	R=-0.440 <i>p</i> =0.203	R=-0.431 <i>p</i> =0.214	R=0.804 <i>p</i> =0.005	R=-0.343 <i>p</i> =0.332	R=0.954 <i>p</i> =0.000	R=-0.347 <i>p</i> =0.326	R=0.673 <i>p</i> =0.033	R=1.000 <i>p</i> = ---	R=-0.815 <i>p</i> =0.004	R=0.925 <i>p</i> =0.000	R=-0.642 <i>p</i> =0.045
2-Acetyl-1,3-di- <i>p</i> -coumaroylglycerol	R=0.819 <i>p</i> =0.004	R=0.776 <i>p</i> =0.008	R=0.751 <i>p</i> =0.012	R=0.672 <i>p</i> =0.033	R=-0.917 <i>p</i> =0.000	R=0.642 <i>p</i> =0.046	R=-0.767 <i>p</i> =0.010	R=0.552 <i>p</i> =0.098	R=-0.862 <i>p</i> =0.001	R=-0.815 <i>p</i> =0.004	R=1.000 <i>p</i> = ---	R=-0.844 <i>p</i> =0.002	R=0.874 <i>p</i> =0.001
Pinobanksin-3O-acetate	R=-0.783 <i>p</i> =0.007	R=-0.633 <i>p</i> =0.049	R=-0.480 <i>p</i> =0.160	R=-0.413 <i>p</i> =0.236	R=0.883 <i>p</i> =0.001	R=-0.457 <i>p</i> =0.184	R=0.893 <i>p</i> =0.000	R=-0.360 <i>p</i> =0.307	R=0.722 <i>p</i> =0.018	R=0.925 <i>p</i> =0.000	R=-0.844 <i>p</i> =0.002	R=1.000 <i>p</i> = ---	R=-0.692 <i>p</i> =0.027
	R=0.871	R=0.837	R=0.952	R=0.791	R=-0.764	R=0.801	R=-0.705	R=0.855	R=-0.775	R=-0.642	R=0.874	R=-0.692	R=1.000

**2-Acetyl-3- <i>p</i> -coumaroyl-1-feruloylglycerol	<i>p</i> =0.001	<i>p</i> =0.002	<i>p</i> =0.000	<i>p</i> =0.006	<i>p</i> =0.010	<i>p</i> =0.005	<i>p</i> =0.023	<i>p</i> =0.002	<i>p</i> =0.008	<i>p</i> =0.045	<i>p</i> =0.001	<i>p</i> =0.027	<i>p</i> =---
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Table legend: R—square R parameter; *p*—Pearson’s correlation parameter.

Table S3. The antimicrobial activity (mg/L) of reference drugs: vancomycin, clarithromycin, ciprofloxacin, and nystatin against reference strains.

Microorganism	MIC [mg/L]
Gram-Positive Bacteria	Vancomycin
<i>S. aureus</i> ATCC 25923	0.49
<i>S. aureus</i> ATCC 29213	0.98
<i>S. epidermidis</i> ATCC 12228	0.98
<i>E. faecalis</i> ATCC 29212	1.95
<i>M. luteus</i> ATCC 10240	0.12
<i>B. cereus</i> ATCC 10876	0.98
Gram-Negative Microaerophilic Bacteria	Clarithromycin
<i>H. pylori</i> ATCC 43504	0.125
Gram-Negative Bacteria	Ciprofloxacin
<i>S. typhimurium</i> ATCC 14028	0.061
<i>E. coli</i> ATCC 25922	0.015
<i>P. mirabilis</i> ATCC 12453	0.03
<i>K. pneumoniae</i> ATCC 13883	0.12
<i>P. aeruginosa</i> ATCC 9027	0.48
Yeasts	Nystatin
<i>C. albicans</i> ATCC 102231	0.48
<i>C. parapsilosis</i> ATCC 22019	0.24
<i>C. glabrata</i> ATCC 90030	0.24

Table S4. Input data of statistical analyses.

Microorganism—Mic (mg/ML)	PLS1	PLS2	PLS3	PLU	UK1	UK2	UK3	UKT	KZ.AO	G.PA
<i>S. aureus</i> ATCC 25923	0.16	0.63	0.08	0.16	0.04	0.04	0.08	0.01	0.16	0.02
<i>S. aureus</i> ATCC 29213	0.31	2.50	0.08	0.31	0.16	0.16	0.16	0.01	0.31	0.08
<i>S. epidermidis</i> ATCC	0.08	0.31	0.04	0.16	0.04	0.04	0.08	0.01	0.08	0.02
<i>E. faecalis</i> ATCC 29212	0.31	2.50	0.16	0.63	0.16	0.16	0.16	0.08	2.50	0.08
<i>M. luteus</i> ATCC 10240	0.08	0.31	0.04	0.08	0.04	0.04	0.04	0.01	0.08	0.02
<i>B. cereus</i> ATCC 10876	0.16	0.63	0.04	0.31	0.16	0.16	0.16	0.02	0.31	0.02
<i>C. albicans</i> ATCC 102231	0.31	1.25	0.08	0.31	0.16	0.16	0.16	0.08	0.31	0.16
<i>C. parapsilosis</i> ATCC 22019	0.31	1.25	0.04	0.31	0.08	0.16	0.08	0.02	0.31	0.08
<i>C. glabrata</i> ATCC 90030	0.31	0.63	0.08	0.63	0.16	0.16	0.16	0.08	0.31	0.08
Components (%PA)	PLS1	PLS2	PLS3	PLU	UK1	UK2	UK3	UKT	KZ.AO	G.PA
Caffeic acid	1.87	2.01	3.08	0.40	1.85	1.83	1.95	2.17	1.01	1.66
<i>p</i> -Coumaric acid	6.20	12.10	2.08	9.01	1.16	1.37	1.20	1.47	3.23	0.41
Vanilline	0.68	2.92	0.12	1.28	0.26	0.28	0.29	0.00	0.43	0.00
Ferulic acid	4.54	6.29	0.98	3.03	2.57	2.66	2.18	0.95	2.12	0.48
Isoferulic acid	1.15	0.76	2.14	0.00	1.03	0.86	1.07	0.94	0.58	0.67
Benzoic acid	1.68	2.50	0.53	2.35	1.50	1.64	1.27	0.53	1.23	0.13
3,4-Dimethylcaffeic acid (DMCA)	1.37	1.03	1.05	0.00	0.08	0.09	0.08	0.55	0.52	2.13
Quercetin	0.19	0.32	0.46	0.00	0.51	0.44	0.49	1.41	0.00	0.57
Pinobanksin-5-methyl ether	0.47	0.44	1.87	0.24	2.32	1.89	2.29	1.73	0.00	2.41
Cinnamic acid	0.44	1.27	0.13	0.00	0.16	0.00	0.00	0.00	0.00	0.00
Quercetin-3-methyl ether	0.28	0.29	0.66	0.00	0.69	0.70	0.70	0.82	0.00	1.37
Pinobanksin	1.15	0.91	3.49	0.31	3.53	3.19	3.52	4.23	1.21	1.60
Apigenin	1.02	0.99	1.79	1.17	1.51	1.24	1.56	0.00	1.45	0.82
Kempferol	0.77	1.07	1.16	1.36	1.07	1.01	1.13	1.86	1.87	0.48
Isorhamnetin	0.24	0.14	0.20	0.77	0.44	0.49	0.43	0.88	1.49	0.52
Luteolin-5-methyl ether	0.39	0.53	1.00	0.70	1.14	1.21	1.13	0.86	1.56	1.41
Quercetine-5,7-dimethyl ether	0.15	0.35	0.35	0.57	0.31	0.41	0.35	0.44	1.20	1.19
Rhamnetin	0.19	0.31	0.63	0.00	0.69	0.63	0.67	1.29	0.36	0.00
Quercetin-dimethyl ether	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.39	1.01
2-Acetyl-1-caffeoyl-3- <i>p</i> -coumaroylglycerol	1.65	1.00	0.00	0.42	0.38	0.38	0.30	0.25	0.00	0.00
Quercetin-dimethyl ether	0.11	0.00	0.75	0.00	0.50	0.60	0.70	0.61	0.00	2.40
2-Acetyl-3-caffeoyl-1-feruloylglycerol	1.02	0.77	0.00	0.56	0.31	0.57	0.32	0.00	0.15	0.00
Caffeic acid prenyl ester 1	1.52	0.56	3.10	0.11	0.60	1.56	3.08	2.41	0.59	0.00
Chrysin	4.46	3.87	11.81	1.11	12.68	10.39	10.23	13.38	2.86	17.47
Pinocembrin	5.41	4.88	6.52	5.10	10.61	9.48	10.68	11.40	5.13	4.52

Acacetin	0.00	0.00	0.00	4.44	0.00	0.00	0.00	0.00	8.28	0.00
Caffeic acid prenyl ester 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.04
Pinocembrin chalcone	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
*Caffeic acid prenyl ester 3	2.26	0.22	3.46	0.00	0.00	0.00	0.00	1.73	0.00	4.93
*Caffeic acid benzyl ester	5.44	4.52	4.62	0.00	3.54	3.45	3.66	5.25	0.75	0.00
Sakuranetin	0.53	0.84	0.00	7.10	1.65	1.16	1.37	1.46	9.23	2.37
Genkwanin	0.00	0.00	0.00	1.62	0.00	0.00	0.00	0.00	3.72	0.00
Galangin	5.78	3.18	12.19	2.61	11.62	10.91	11.75	11.49	1.88	5.31
Kaempferide	1.19	0.95	0.23	4.97	0.34	0.67	0.55	0.57	5.03	0.00
2-Acetyl-1,3-di- <i>p</i> -coumaroylglycerol	4.39	7.56	0.50	4.05	0.56	0.91	0.47	0.42	6.57	0.00
Pinobanksin-3O-acetate	3.83	1.62	8.89	1.77	12.32	12.18	12.18	8.87	2.47	6.68
Quercetin-dimethyl	0.00	0.00	0.00	1.03	0.00	0.00	0.00	0.00	1.69	0.00
**2-Acetyl-3- <i>p</i> -coumaroyl-1-feruloylglycerol	2.46	2.98	0.00	1.32	0.50	0.65	0.42	0.00	1.23	0.00

Table legend: * - component tentatively identified; ** - substitution positioning of glycerol was tentatively identified; **GP**—Greece, Parga; **KZ**—Kazakhstan, Almatka Oblast; **PLS1**—Poland, Lower Silesia Region 1; **PLS2**—Poland, Lower Silesia Region 2; **PLS3**—Poland, Lower Silesia Region3; **PLU**—Poland, Lubelszczyzna Region; **UK1**—Ukraine, Khmeltsky 1; **UK2**—Ukraine, Khmeltsky 2; **UK3**—Ukraine, Khmeltsky 3; **UT**—Ukraine, Tarnopol.