

## Supporting Information

# Antifungal Potential of Canarian Plant Extracts against High-risk Phytopathogens in Crops

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### Table of Contents

**Table S1.** Antifungal effects (% growth inhibition) of plant extracts against *Alternaria alternata*, *Botrytis cinerea* and *Fusarium oxysporum*.

**Table S2.** Antifungal effects (% growth inhibition) of selected plant fractions against *Alternaria alternata*, *Botrytis cinerea* and *Fusarium oxysporum*.

**Figure S1.** *In vitro* test-assay of plant extracts against *Alternaria alternata*, *Botrytis cinerea* and *Fusarium oxysporum*.

**Table S1.** Antifungal effects (% growth inhibition) of plant extracts against *Alternaria alternata*, *Botrytis cinerea* and *Fusarium oxysporum*.

Plant extract	<i>A. alternata</i>			<i>B. cinerea</i>			<i>F. oxysporum</i>		
	1 mg/mL	0.5 mg/mL	0.1 mg/mL	1 mg/mL	0.5 mg/mL	0.1 mg/mL	1 mg/mL	0.5 mg/mL	0.1 mg/mL
<i>C. fusca</i>	NA	ND	ND	28.91 ± 8.49	24.89 ± 6.71	18.94 ± 6.27	NA	ND	ND
<i>A. broussonetii</i>	NA	ND	ND	NA	ND	ND	NA	ND	ND
<i>A. thuscula</i>	23.63 ± 1.48	21.61 ± 5.32	13.34 ± 3.47	12.41 ± 0.55	ND	ND	41.21 ± 1.95	32.33 ± 4.10	19.29 ± 2.92
<i>G. cassinoides</i>	NA	ND	ND	NA	ND	ND	NA	ND	ND
<i>C. symphytifolius</i>	38.10 ± 10.85	18.96 ± 3.73	ND	39.08 ± 3.70	37.98 ± 4.72	19.57 ± 3.32	35.27 ± 4.92	NA	ND
<i>S. canariensis</i>	47.60 ± 0.70	44.61 ± 1.30	27.36 ± 2.54	62.16 ± 4.36	56.23 ± 3.90	35.13 ± 7.83	47.95 ± 1.82	44.76 ± 1.17	33.21 ± 1.93
<i>A. barbuja</i>	NA	ND	ND	NA	ND	ND	NA	ND	ND
<i>L. novocanariensis</i>	NA	ND	ND	NA	ND	ND	16.60 ± 3.57	ND	ND
<i>L. canariensis</i>	NA	ND	ND	NA	ND	ND	NA	ND	ND
<i>R. pinnata</i>	NA	ND	ND	28.27 ± 7.49	NA	ND	25.47 ± 4.38	NA	ND
<i>R. chalepensis</i>	17.08 ± 3.81	ND	ND	NA	ND	ND	44.09 ± 1.63	NA	ND
<i>D. innoxia</i>	37.95 ± 2.40	35.14 ± 4.34	25.75 ± 4.40	52.11 ± 5.22	30.48 ± 5.19	13.28 ± 3.27	20.74 ± 4.40	NA	ND
<i>D. stramonium</i>	NA	ND	ND	NA	ND	ND	NA	ND	ND
<i>N. glauca</i>	NA	ND	ND	NA	ND	ND	NA	ND	ND
<i>S. origanifolia</i>	NA	ND	ND	NA	ND	ND	NA	ND	ND
<i>W. aristata</i>	22.99 ± 7.97	NA	ND	72.22 ± 9.44	52.57 ± 4.96	27.79 ± 7.69	25.39 ± 3.92	13.16 ± 2.09	ND
Methylparaben	100.00 ± 0.00	85.11 ± 8.66	21.67 ± 5.70	100.00 ± 0.00	100.00 ± 0.00	34.13 ± 5.55	100.00 ± 0.00	82.78 ± 5.93	45.92 ± 9.64

Extracts with an inhibition growth higher than 20% at 1 mg/mL were assayed at lower concentrations (0.5 and 0.1 mg/mL). % Growth Inhibition: Means ± standard deviation (SD). NA : not active (% inhibition ≤10); ND : not determined; Methylparaben was used as a positive control.

**Table S2.** Antifungal effects (% growth inhibition) of selected plant fractions against *Alternaria alternata*, *Botrytis cinerea* and *Fusarium oxysporum*.

Plant	Sample*	<i>A. alternata</i>			<i>B. cinerea</i>			<i>F. oxysporum</i>		
		1 mg/mL	0.5 mg/mL	0.1 mg/mL	1 mg/mL	0.5 mg/mL	0.1 mg/mL	1 mg/mL	0.5 mg/mL	0.1 mg/mL
<i>A. thuscula</i>	Extract EtOH	23.63 ± 1.48	21.61 ± 5.32	13.34 ± 3.47	12.41 ± 0.55	ND	ND	41.21 ± 1.95	32.33 ± 4.10	19.29 ± 2.92
	A-F1	ND	ND	ND	ND	ND	ND	37.94 ± 5.50	NA	ND
	A-F2	ND	ND	ND	ND	ND	ND	18.68 ± 6.19	ND	ND
	A-F3	ND	ND	ND	ND	ND	ND	NA	ND	ND
<i>C. symphytifolius</i>	Extract EtOH	38.10 ± 10.85	18.96 ± 3.73	ND	39.08 ± 3.70	37.98 ± 4.72	19.57 ± 3.32	35.27 ± 4.92	NA	ND
	C-F1	51.32 ± 4.28	54.46 ± 3.04	45.72 ± 3.60	88.43 ± 5.34	85.80 ± 6.56	69.54 ± 5.37	44.24 ± 1.52	35.21 ± 2.15	27.44 ± 1.99
	C-F2	54.95 ± 2.27	59.72 ± 3.54	36.67 ± 2.21	84.72 ± 3.66	80.54 ± 7.95	69.20 ± 11.46	42.01 ± 2.32	38.48 ± 2.46	26.59 ± 2.40
	C-F3	11.76 ± 1.58	ND	ND	16.77 ± 4.35	ND	ND	36.84 ± 4.62	29.86 ± 2.63	11.62 ± 3.45
<i>S. canariensis</i>	Extract EtOH	47.60 ± 0.70	44.61 ± 1.30	27.36 ± 2.54	62.16 ± 4.36	56.23 ± 3.90	35.13 ± 7.83	47.95 ± 1.82	44.76 ± 1.17	33.21 ± 1.93
	S-F1	59.51 ± 1.92	58.31 ± 1.85	60.55 ± 1.88	86.27 ± 2.88	83.93 ± 4.57	69.14 ± 2.89	65.54 ± 2.20	69.94 ± 4.09	46.85 ± 2.07
	S-F2	57.37 ± 2.29	52.71 ± 3.01	34.64 ± 1.35	78.10 ± 2.51	75.36 ± 5.34	58.54 ± 11.73	56.08 ± 1.76	49.92 ± 2.94	33.04 ± 4.76
	S-F3	NA	ND	ND	NA	ND	ND	NA	ND	ND
<i>R. chalepensis</i>	Extract EtOH	17.08 ± 3.81	ND	ND	NA	ND	ND	44.09 ± 1.63	NA	ND
	R-F1	ND	ND	ND	ND	ND	ND	78.11 ± 1.12	67.96 ± 2.38	12.29 ± 2.08
	R-F2	ND	ND	ND	ND	ND	ND	36.44 ± 1.72	30.05 ± 3.33	13.49 ± 1.61
	R-F3	ND	ND	ND	ND	ND	ND	NA	ND	ND
<i>D. innoxia</i>	Extract EtOH	37.95 ± 2.40	35.14 ± 4.34	25.75 ± 4.40	52.11 ± 5.22	30.48 ± 5.19	13.28 ± 3.27	20.74 ± 4.40	NA	ND
	D-F1	NA	ND	ND	13.85 ± 2.43	ND	ND	ND	ND	ND
	D-F2	23.01 ± 4.58	12.74 ± 3.63	ND	50.28 ± 8.84	32.36 ± 7.90	23.45 ± 5.49	ND	ND	ND
	D-F3	39.36 ± 6.39	15.38 ± 3.84	ND	68.49 ± 7.94	60.99 ± 8.30	27.86 ± 8.37	ND	ND	ND
<i>W. aristata</i>	Extract EtOH	22.99 ± 7.97	NA	ND	72.22 ± 9.44	52.57 ± 4.96	27.79 ± 7.69	25.39 ± 3.92	13.16 ± 2.09	ND
	W-F1	ND	ND	ND	25.56 ± 7.00	NA	ND	ND	ND	ND
	W-F2	ND	ND	ND	51.72 ± 5.06	NA	ND	ND	ND	ND
	W-F3	ND	ND	ND	84.30 ± 4.77	NA	ND	ND	ND	ND

F1: hexanes fraction; F2: ethyl acetate fraction; F3: water fraction. % Growth Inhibition: Means ± standard deviation (SD).

NA: not active (% inhibition ≤10); ND: not determined; Methylparaben was used as a positive control.

(A)



(B)



(C)



**Figure S1.** *In vitro* test-assay of plant extracts against *Alternaria alternata* (A), *Botrytis cinerea* (B) and *Fusarium oxysporum* (C).