

# **Valorization of the Hydrolate Byproduct From the Industrial Extraction of Purple Allium sativum Essential Oil as a Source of Nematicidal Products**

Alberto Galisteo <sup>1</sup>, Azucena González-Coloma <sup>1</sup>, Purificación Castillo <sup>2</sup> and María Fe Andrés <sup>1,\*</sup>

<sup>1</sup> Institute of Agriculture Sciences, CSIC, 28006, Madrid, Spain; [albertogapre@ica.csic.es](mailto:albertogapre@ica.csic.es) (A.G.); [azu@ica.csic.es](mailto:azu@ica.csic.es) (A.G.C.)

<sup>2</sup> COOPAMAN S.C.L. [cuviman@coopaman.com](mailto:cuviman@coopaman.com) (P.C.)

\* Correspondence: [mafay@ica.csic.es](mailto:mafay@ica.csic.es) (M.F.A.)

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Table S1: Estimated lethal concentrations ( $LC_{50}$  and  $LC_{90}$ ) of the essential oil, hydrolate and hydrolate organic fraction against *Meloidogyne javanica* juveniles after 72 h.

Treatments	Intercept	Standard Error	Slope	$LC_{50}$	$LC_{90}$
				<u>(95% Confidence interval)</u>	<u>(95% Confidence interval)</u>
Essential oil	2.81	0.067	240.46	0.012 (0.011-0.0130)*	0.017(0.016-0.0175)
Hydrolate OF	2.81	0.062	264.88	0.0106 (0.0102-0.0110)*	0.0154 (0.0150-0.0158)
Hydrolate	1.71	0.084	0.22	7.79 (7.23-7.97)**	13.27 (12.63-14.03)

\* Values are mg / mL. \*\* Values are % v HD / v water

Table S2: Complete dates of chemical analysis by GC-MS and library identification of the hydrolate organic fraction and essential oil from *Allium sativum*.

Compound	Rt	RI	% Abundance EO	% Abundance Hydrolate OF	m/z	Identification
p-methyl pyridine	2.99	874		18.22	93/66/92/65/67/39/94/63/40/51	NIST
methyl 2-propenyl disulfide	3.57	916	5.48	4.70	120/41/39/45/73/78/122/80/63/121	NIST*
diallyl disulfide	6.09	1077	31.31	27.44	41/81/113/39/79/85/45/105/73/112	NIST*
(E)-1-allyl-2-(prop-1-en-1-yl)disulfane	6.51	1100		2.15	81/41/73/45/146/104/39/61/105/71	NIST
methyl allyl trisulfide	7.29	1137	12.25	10.63	87/73/41/45/39/47/88/78/110/63	NIST*
2-vinyl-4H-1,3-dithiine	8.89	1212	1.31	1.01	72/71/111/144/97/45/79/39/103/73	NIST*
2-methyl-3-(methylthio) furan	9.05	1219		2.53	128/99/65/110/113/67/53/85/66/39	NIST
diallyl trisulfide	10.81	1298	26.58	16.82	113/73/41/45/39/79/114/71/72/47	NIST*

\* These compounds were compared with the m/z spectrum of the compounds of the EO in literature [1,2].

## References

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