

Supplementary Table A Compounds used for stimulation in EAG experiments.

| Compound | Chemical class | Purity | Purchased from* | Ecological relevance | References |
|-------------------------------|---------------------|-----------------|----------------------------|---|--|
| Allyl isothiocyanate | sulfur compound | ≥ 95% | Aldrich | Attractive to gravid females Found in some Brassica volatile organic compounds (VOC) profiles Stimulates oviposition | Wallbank & Wheatley, 1976; Finch, 1978; Finch & Skinner, 1982; Nottingham, 1988; Tuttle et al., 1988; Liu et al., 2018 |
| Dimethyl disulfide | sulfur compound | ≥ 99% | Aldrich | Reduces oviposition Found in some Brassica VOC profiles | Wallbank & Wheatley, 1976; Pierre et al., 2011; Kergunteuil et al., 2012; Lamy et al., 2017; Liu et al., 2018 |
| <i>cis</i> -3-Hexenyl acetate | green leaf volatile | ≥ 98% | Sigma-Aldrich | Main compound of attractive Chinese cabbage Found in other Brassica species | Wallbank & Wheatley, 1976; Tollsten & Bergstrom, 1988; Pierre et al., 2011; Kergunteuil et al., 2012; Liu et al., 2018 |
| Methyl salicylate | defense hormone | ≥ 99% | Sigma-Aldrich | Herbivore-induced plant volatile and attracting insects in the field in different crops, including Brassica | Orre et al., 2010; Simpson et al., 2011; Pierre et al., 2011; Kergunteuil et al., 2012 |
| Ethylacetophenone | aromatic compound | 97% | Sigma Aldrich | Flower-derived compound Attractive as food signal | Rännbäck, 2008 |
| α-Farnesene | sesquiterpene | ≥ 90% | Bedoukian Bio | Found in the volatile profiles of different <i>D. radicum</i> Brassica host species Predominant in the VOC profile of broccoli | Tollsten & Bergstrom, 1988; Pierre et al., 2011; Kergunteuil et al., 2015 |
| β -Caryophyllene | sesquiterpene | ≥ 98.5% | Sigma | Found in the volatile profiles of different <i>D. radicum</i> Brassica hosts species Predominant in the VOC profile of oil seed rape | Tollsten & Bergstrom, 1988; Pierre et al., 2011; Kergunteuil et al., 2015 |
| α-Pinene | monoterpene | 98% | Aldrich | Found in the VOC profiles of different <i>D. radicum</i> Brassica hosts species | Tollsten & Bergstrom, 1988; Pierre et al., 2011; Kergunteuil et al., 2015 |
| α-Thujene | monoterpene | 95 % | Toronto Research Chemicals | Found in the VOC profiles of different <i>D. radicum</i> Brassica hosts species, | Kergunteuil et al., 2015 |
| Eucalyptol | monoterpene | 99% | Aldrich | Reduces oviposition Found in some Brassica VOC profiles | Lamy et al., 2017; Liu et al., 2018 |
| Limonene | monoterpene | 97% | Sigma Aldrich | Found in volatile profiles of different <i>D. radicum</i> Brassica hosts species Reduces plant colonization | Pierre et al., 2011; Kergunteuil, 2013; Kergunteuil et al., 2015; Liu et al., 2018 |
| Linalool | monoterpene | 97% | Aldrich | Predominant in the VOC profile of Chinese cabbage | Kergunteuil et al., 2015 |
| Myrcene | monoterpene | Technical grade | Aldrich | Found in the volatile profiles of different <i>D. radicum</i> Brassica host species | Tollsten & Bergstrom, 1988; Kergunteuil et al., 2015 |
| Ocimene (mixture of isomers) | monoterpene | ≥ 90% | Sigma-Aldrich | Found in the volatile profiles of different <i>D. radicum</i> Brassica hosts species | Tollsten & Bergstrom, 1988 |
| Sabinene | monoterpene | 98% | abcr chemicals | Found in the volatile profiles of different <i>D. radicum</i> Brassica hosts species | Tollsten & Bergstrom, 1988 |

* suppliers: Bedoukian, Danbury, CT, United States; Sigma-Aldrich, Saint Quentin Fallavier, France; Toronto Research Chemicals, Toronto, Canada; abcr chemicals, Karlsruhe, Germany