



## Evaluating aggressiveness and host range of *Alternaria dauci* in a controlled environment

Submitted by Emmanuel Lemoine on Thu, 02/12/2015 - 13:06

Titre	Evaluating aggressiveness and host range of <i>Alternaria dauci</i> in a controlled environment
Type de publication	Article de revue
Auteur	Boedo, Cora [1], Benichou, Soumaya [2], Berruyer, Romain [3], Bersihand, Stéphanie [4], Dongo, A. [5], Simoneau, Philippe [6], Lecomte, Mickaël [7], Briard, Mathilde [8], Le Clerc, Valérie [9], Poupard, Pascal [10]
Editeur	Wiley
Type	Article scientifique dans une revue à comité de lecture
Année	2012
Langue	Anglais
Date	2012
Numéro	1
Pagination	63 - 75
Volume	61
Titre de la revue	Plant Pathology
ISSN	1365-3059
Mots-clés	alternaria leaf blight [11], alternative host [12], Apiaceae [13], <i>Daucus</i> sp. [14], intergenic spacer [15], necrotrophic fungus [16]
Résumé en anglais	<p>The aggressiveness of <i>Alternaria dauci</i> isolates was investigated in greenhouse conditions. Twenty-seven isolates were pre-selected from a large collection to represent high diversity according to geographic or host origins and intergenic spacer (IGS) polymorphism. IGS sequence analysis revealed that isolates were grouped within three different clusters. Eleven isolates were selected and inoculated on a susceptible carrot cultivar. Three criteria (mean lesion number, mean necrotic leaf area and mean disease index) were used to assess the aggressiveness of isolates. Continuous variation in aggressiveness was shown and no clear division into isolate classes was evident. For the host range study, two isolates were inoculated under greenhouse conditions onto nine cultivated Apiaceae species, two wild <i>Daucus</i> species and six cultivated non-Apiaceae species representing six botanical families. Lesions varying in severity were observed on all dicot species (Apiaceae and non-Apiaceae), but no symptoms developed on the two monocots studied (leek and sweetcorn). Plant species were also differentiated on the basis of expanding lesions (cultivated and wild carrot, dill and fennel) or non-expanding lesions (other dicot species). Typical <i>A. dauci</i> conidia were observed after in vitro incubation of leaves with symptoms. Fungal structures were isolated from lesions and <i>A. dauci</i> was confirmed on the basis of conidial morphology and specific conventional PCR results. Genotyping of individual isolates performed with microsatellite markers confirmed the presence of the inoculated isolate. The results clearly showed that, in controlled conditions, the host range of <i>A. dauci</i> is not restricted to carrot.</p>

URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua7791">http://okina.univ-angers.fr/publications/ua7791</a> [17]
DOI	10.1111/j.1365-3059.2011.02494.x [18]
Lien vers le document	<a href="http://dx.doi.org/10.1111/j.1365-3059.2011.02494.x">http://dx.doi.org/10.1111/j.1365-3059.2011.02494.x</a> [18]

---

## Liens

- [1] [http://okina.univ-angers.fr/publications?f\[author\]=160](http://okina.univ-angers.fr/publications?f[author]=160)
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=12182](http://okina.univ-angers.fr/publications?f[author]=12182)
- [3] <http://okina.univ-angers.fr/romain.berruyer/publications>
- [4] [http://okina.univ-angers.fr/publications?f\[author\]=162](http://okina.univ-angers.fr/publications?f[author]=162)
- [5] [http://okina.univ-angers.fr/publications?f\[author\]=12183](http://okina.univ-angers.fr/publications?f[author]=12183)
- [6] <http://okina.univ-angers.fr/philippe.simoneau/publications>
- [7] [http://okina.univ-angers.fr/publications?f\[author\]=157](http://okina.univ-angers.fr/publications?f[author]=157)
- [8] [http://okina.univ-angers.fr/publications?f\[author\]=166](http://okina.univ-angers.fr/publications?f[author]=166)
- [9] [http://okina.univ-angers.fr/publications?f\[author\]=167](http://okina.univ-angers.fr/publications?f[author]=167)
- [10] <http://okina.univ-angers.fr/pascal.poupard/publications>
- [11] [http://okina.univ-angers.fr/publications?f\[keyword\]=12047](http://okina.univ-angers.fr/publications?f[keyword]=12047)
- [12] [http://okina.univ-angers.fr/publications?f\[keyword\]=12048](http://okina.univ-angers.fr/publications?f[keyword]=12048)
- [13] [http://okina.univ-angers.fr/publications?f\[keyword\]=12049](http://okina.univ-angers.fr/publications?f[keyword]=12049)
- [14] [http://okina.univ-angers.fr/publications?f\[keyword\]=12050](http://okina.univ-angers.fr/publications?f[keyword]=12050)
- [15] [http://okina.univ-angers.fr/publications?f\[keyword\]=12051](http://okina.univ-angers.fr/publications?f[keyword]=12051)
- [16] [http://okina.univ-angers.fr/publications?f\[keyword\]=11832](http://okina.univ-angers.fr/publications?f[keyword]=11832)
- [17] <http://okina.univ-angers.fr/publications/ua7791>
- [18] <http://dx.doi.org/10.1111/j.1365-3059.2011.02494.x>

Publié sur *Okina* (<http://okina.univ-angers.fr>)