



Virulence characterization of *Venturia inaequalis* reference isolates on the differential set of *Malus* hosts

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Titre	Virulence characterization of <i>Venturia inaequalis</i> reference isolates on the differential set of <i>Malus</i> hosts
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Auteur	Caffier, Valérie [1], Patocchi, Andrea [2], Expert, Pascale [3], Bellanger, Marie-Noëlle [4], Durel, Charles-Eric [5], Hilber-Bodmer, Maja [6], Broggini, Giovanni AL [7], Groenwold, Remmelt [8], Bus, Vincent G. M. [9]
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Résumé en anglais	<p>A set of differential hosts has recently been identified for 17 apple scab resistance genes in an updated system for defining gene-for-gene (GfG) relationships in the <i>Venturia inaequalis</i>-<i>Malus</i> pathosystem. However, a set of reference isolates characterized for their complementary avirulence alleles is not yet available. In this paper, we report on improving the set of differential hosts for h(7) and propose the apple genotype LPG3-29 as carrying the single major resistance gene Rvi7. We characterized a reference set of 23 <i>V. inaequalis</i> isolates on 14 differential apple hosts carrying major resistance genes under controlled conditions. We identified isolates that were virulent on at least one of the following defined resistance gene hosts: h(1), h(2), h(3), h(4), h(5), h(6), h(7), h(8), h(9), h(10) and h(13). Sixteen different virulence patterns were observed. In general, the isolates carried one to three virulences, but some of them were more complex, with up to six virulences. This set of well-characterized isolates will be helpful for the identification of additional apple scab resistance genes in apple germplasm and the characterization of new GfG relationships to help improve our understanding of the host-pathogen interactions in the <i>V. inaequalis</i>-<i>Malus</i> pathosystem.</p>
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Liens

[1] <http://okina.univ-angers.fr/v.caffier/publications>

- [2] [http://okina.univ-angers.fr/publications?f\[author\]=12077](http://okina.univ-angers.fr/publications?f[author]=12077)
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