

The AvrE superfamily: ancestral type III effectors involved in suppression of pathogen-associated molecular pattern-triggered immunity

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Résumé en anglais	<p>The AvrE superfamily of type III effectors (T3Es) is widespread among type III-dependent phyto-bacteria and plays a crucial role during bacterial pathogenesis. Members of the AvrE superfamily are vertically inherited core effectors, indicating an ancestral acquisition of these effectors in bacterial plant pathogens. AvrE-T3Es contribute significantly to virulence by suppressing pathogen-associated molecular pattern (PAMP)-triggered immunity. They inhibit salicylic acid-mediated plant defences, interfere with vesicular trafficking and promote bacterial growth <i>in planta</i>. AvrE-T3Es elicit cell death in both host and non-host plants independent of any known plant resistance protein, suggesting an original interaction with the plant immune system. Recent studies in yeast have indicated that they activate protein phosphatase 2A and inhibit serine palmitoyl transferase, the first enzyme of the sphingolipid biosynthesis pathway. In this review, we describe the current picture that has emerged from studies of the different members of this fascinating large family.</p>
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