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BOOK OF ABSTRACTS



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Characterization of the biosynthesis of saponins during seed development in peas (*Pisum sativum*) and faba beans (*Vicia faba*)

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The use of pulses as ingredients for the production of food products rich in plant proteins is increasing. However, protein fractions prepared from pea or faba beans contain significant amounts of saponins, glycosylated triterpenes which can impart a bitter taste to the final food product. In addition, saponins have also been described to be involved in plant responses to biotic and abiotic stresses¹. In this study, we identified and characterized the genes involved in saponin biosynthesis during pea seed development², and optimized a saponin extraction protocol to follow the biosynthesis of these compounds during the development of pea and faba bean seeds. The identification of mutants affecting the function of key genes of the saponin biosynthetic pathway is currently underway in pea³. This study is funded under the LEG'UP FUI (Unique Interministerial Fund) project (AAP No. 18).

Keywords: *protein, flavour, food*

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