

Title (en)
METHOD FOR CONTROLLED ELICITATION OF PEPPER PLANTS UNDER CULTIVATION TO INCREASE THEIR SYNTHESIS OF SECONDARY METABOLITES OF INDUSTRIAL INTEREST

Title (de)
VERFAHREN ZUR KONTROLLIERTEN FREISETZUNG VON PFEFFERPFLANZEN UNTER KULTIVIERUNG ZUR ERHÖHUNG IHRER SYNTHESE VON SEKUNDÄREN METABOLITEN VON INDUSTRIELLEM INTERESSE

Title (fr)
PROCEDE D'ELICITATION CONTROLEE DE PLANTS DE PIMENT DURANT LEUR CULTURE POUR AUGMENTER LEUR SYNTHESE DE METABOLITES SECONDAIRES D'INTERET INDUSTRIEL

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Application
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Abstract (en)
[origin: WO2021058410A1] The subject matter of the invention is a method for controlled elicitation of plants under cultivation in order to increase their synthesis of secondary metabolites. The invention is characterised in that it comprises the following steps, in which: - firstly, the plants are treated by applying a hydrogen peroxide solution (H₂O₂) at a concentration ranging from 1 mM to 800 mM, and - secondly, a water deficit is generated by bringing the irrigation of the plants under cultivation to a complete stop, the H₂O₂ treatment and the water deficit being achieved either concurrently or separately 1 to 5 days before harvesting, and - from the plants thus treated, fruits are harvested in which the synthesis of secondary metabolites chosen from capsaicinoids, flavonoids, carotenoids and terpenoids, alone or in combination, has been increased. The invention also relates to plants in the nightshade family which can be obtained by the method according to the invention, as well as the use of the method according to the invention in plants in the nightshade family, to obtain fruits in which the content of secondary metabolites, preferably capsaicinoids, synthesised by the plants has been increased.

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