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Título artículo: Selection of populations of *Salvia lavandulifolia* Vahl. based on crop adaptations, phenolic chemotypes and biological capacities of the distillation by-products

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RESUMEN: Spanish sage (Salvia lavandulifolia Vahl.) is well recognized for the different applications of its essential oil. As occurs with other aromatic species, the selection of plant material that presents certain features such as good crop adaptation, higher biomass production and the presence of certain active compounds of interest together with low intragenetic and interannual variations can increase the profitability of this crop. Characterized and stable chemotypes of aromatic plants over time are essential to develop novel applications. Considering that non-volatile compounds such as phenols remain present in plant biomass after the distillation of essential oils, an investigation was conducted to evaluate their potential as active substances for the development of different plant-based products related to their capacities as antioxidants, chelating agents, antifungals, acetylcholinesterase inhibitors, photoprotectors and phytostimulants. In general, most of the S. lavandulifolia samples presented a good balance between adaptability, phenol profile and bioactivities together with uniform results between individuals and years. Despite its lower adaptability and biomass production, Tuixent-5 probably presented the best balance between biological capacities and homogeneous results considering individuals over the years, and consequently, it is the best candidate for a breeding program of this crop aimed to develop novel applications based on renewable by-products.

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