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Título artículo: Agronomic Evaluation and Chemical Characterization of *Lavandula latifolia* Medik. under the Semiarid Conditions of the Spanish Southeast

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RESUMEN: Lavandula latifolia is one of the main rainfed crops of aromatic and medicinal plants produced in Spain. As a global concern, the agronomic productivity of this aromatic crop is also threatened by the consequences of imminent climate change. On this basis, the study of the agronomic production of two drought-tolerant ecotypes, after three years of cultivations practices, constitutes the main objective of the present study. For this trial, clones of the two pre-selected ecotypes, along with clones from two commercial plants (control), were grown in an experimental plot. The main results confirmed an increase in biomass and essential oil production with plant age. The essential oil chemotype defined by 1,8-cineol, linalool, and camphor was maintained over time, but a decrease in 1,8-cineol in the benefit of linalool was detected. In the phenolic profile, 14 components were identified, with salvianic acid and a rosmarinic acid derivate being the main compounds quantified. These phenolic extracts showed potent in vitro antioxidant capacity, and after the second year of cultivation practices, both phenolic compounds and antioxidant capacity remained stable. Thus, under semiarid conditions, L. latifolia drought-tolerant ecotypes reach a good level of production after the second year of crop establishment.

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