

SUMMARY

EDAPHOCLIMATIC VOCATION OF THE MEXICAN TERRITORY FOR HIERBA SANTA (*Piper auritum* Kunth) CULTIVATION.

Piper auritum Kunth belongs to the *Piper* genus of the Piperaceae family, that has around 1000 species. *Piper auritum* possesses an important medicinal value, culinary uses, has a biocidal action and, together with its low nutrients requirements, it is considered as an horticultural crop of great agricultural potential. Because this species grows wild, there are no known commercial plantations in our country. Therefore, the objective of this work was to analyze the presence of *P. auritum* by state of the Mexican Republic, in order to evaluate its current and potential distribution and to elaborate a model of edaphoclimatic vocation using MaxEnt, to represent the potential areas with suitable edaphoclimatic characteristics for the development of the species and the validation of this model. For this, the polygon of Mexico was defined as a geographical scale. A frequency analysis was carried out, response curves were generated, a predicted probability map and the contributions of the environmental variables were estimated. The results showed that *P. auritum* has been reported in 19 states of the Mexican Republic: Campeche, Chiapas, Distrito Federal, Guerrero, Hidalgo, Jalisco, Morelos, Nayarit, Nuevo Leon, Oaxaca, Puebla, Querétaro, Quintana Roo, San Luis Potosí, Sonora, Tabasco, Tamaulipas, Veracruz and Yucatan. The states that obtained greater record of presence were Veracruz with 26.31%, Chiapas with 25.38% and Quintana Roo with 11.41%. The presence of *P. auritum* is concentrated in the Neotropical biogeographic region, where humid and subhumid tropical climates predominate. The states that presented a high potential and probability for adequate conditions for this species were Veracruz, Chiapas, Quintana Roo, Puebla, Oaxaca, Hidalgo, Yucatan and Tabasco. The states of Campeche, Nuevo Leon, Jalisco, Guerrero, Morelos, Querétaro, Distrito Federal, Nayarit were in the medium potential parameter, and with low potential were the states of Sonora, San Luis Potosí and Tamaulipas. It is recommended to carry out a more detailed study to identify the specific bioclimatic conditions for this species development.

Key words: *Piper auritum*, potential zones, edaphoclimatic conditions.