

SUMMARY

Morphological characterization of two varieties of manzano chili (*Capsicum pubescens* Ruiz & Pavon)

Capsicum pubescens Ruiz & Pavon grows in temperate zones of Veracruz state, for self-consumption and is marketed locally, it is grown in backyard orchards without adequate agronomic technification, but often the quality of the seed is low, and this affects the economy of local producers. The objective of the present investigation was to describe morphologically two populations of chile manzano in the mountains of central Veracruz. The module for varietal characterization was established at CBTA No. 99, in the municipality of Coscomatepec, under greenhouse conditions, during the months of August 2020 to September 2021; in an area of 176 m². The plant material used MEXUVNE1-15-C2 and MEXUVCU1-16-C2 came from manzano chili fruits, selected in the localities Necoxtla, Camerino Z. Mendoza and Cuauyolotitla, Tehuipango, collected in the central zone of the state of Veracruz, by its outstanding morphological characteristics such as size, color, number of locules, brightness, etc. For characterization, 47 descriptors were used from the Guide of the National Seed Inspection and Certification Service (SNICS); the plants were characterized by phenological stage (seedling, adult plant, flowering, and fruiting). For analysis of qualitative data, absolute frequencies were obtained, while for quantitative data, descriptive statistics were performed, comparison of means with Student's t-test, as well as a principal component analysis (PCA), which allowed estimation and description of the two varieties. According to the results, the variety MEXUVCU1-16-C2 presented a height in the fruiting stage of 123 cm, fruits with a length of 4.71 cm and a diameter of 4.57 cm, as well as a square shape. The MEXUVNE1-15-C2 variety, obtained 95 cm in height, yellow fruits with a length of 4.78 cm, a diameter of 4.75 cm and a square shape. The statistical analyzes allowed to identify that the two varieties present similar morphological characteristics in the stages of seedling and adult plant. However, the MEXUVNE1-15-C2 variety stands out in the phenological stage of fruiting by having morphological characteristics that adapt to the requirements from the market.

Key words: Mountains, morphological descriptors, chile manzano, selection.