

GUIDE BASED ON PHYLOGENETIC ANALYSIS FOR THE IDENTIFICATION OF ALTERNATIVE MATERIALS TO 'FUERTE' AND 'HASS'

E. Campos¹, E. Villanueva¹, J. Rodríguez¹ and M.C Espíndola¹

¹Programa de Fruticultura. Colegio de Postgraduados, Montecillo 56230, Estado de México, México. educamro@yahoo.com.mx

The objectives of this investigation were: 1) Carry out phylogenetic analysis among materials with ancestry in 'Fuerte' and 'Hass' to determine characters of interest for genetic improvement and 2) Propose a guide for distinguishing alternative cultivars to 'Fuerte' and 'Hass' in Mexico. The characters associated with flower, fruit and seed were the attributes with higher influence in separating materials with ancestry in 'Hass' and Fuerte. Some of the characters of horticultural interest were those of floral type, characteristics of the fruit such as skin colour in mature fruits, shape and size of fruit and seed, growth habit of the tree, branch distribution in both cultivars. In the case of 'Hass,' the absence of fibre in the fruit was a decisive character to separate materials. Determining characters that may be appreciated as inheritable among materials would be of interest in programs of genetic improvement since characters that would inherited could be identified or selected early.