SELECTION OF POTENTIAL POLLENIZERS FOR 'HASS' IN SOUTHERN SPAIN BASED ON FLOWERING SEASON AND MALE-FEMALE OVERLAP

M. Librada Alcaraz and J.I. Hormaza

Estación Experimental la Mayora – CSIC. 29750 Algarrobo-Costa, Málaga, España.

With the objective of selecting potential pollenizer avocado genotypes for 'Hass,' we have monitored during two consecutive years the flowering season of 27 cultivars maintained in the avocado collection of the E.E. la Mayora in Spain. The average length of the flowering season is 45 days ranging from 18 days for 'Harvest' to 50 days for 'Fuerte'. The early flowering genotypes such as 'Fuerte', 'Cupanda' and 'Shepard' start anthesis during the third week of March; whereas late flowering genotypes are 'Colin V-33', 'Adi', 'OA184' and 'Harvest', which start in the second week of April. Flowering of 'Hass' lasts 30 days from the first week of April until the second week of May. Since a good pollenizer must present not only an overlap in flowering season but also an overlap in sexual stages. In order to select an appropriate pollenizer for 'Hass,' a group of 11 'Hass'-like genotypes was studied with more detail. Two trees per genotype were monitored every 2 hours during the blooming season to determine the stages of male and female overlap. Although overlap in sexual stages among trees of the same cultivar and among flowers of the same tree was frequent at the beginning and at the end of the blooming season, the results obtained indicate that BL516 ("Marvel') and BL667 ('Nobel') show a high sexual overlap with 'Hass'. Taking into account the time of blooming and the overlap in sexual stages, those two genotypes could be interesting as potential pollenizers for 'Hass' under our growing conditions.