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## BEHAVIOUR OF 10 AVOCADO VARIETIES IN SICILY

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2 Ha avocado plantation was established in Lascari (Western Sicily) in 1993 on a soil having 41% sand, 59% clay and lime, high pH (8,2), high calcium percentage (27,7 total CaCO<sub>3</sub>), low ECe. Irrigation water had a low Cl<sup>-</sup> content.

Bacon, Ettinger, Fuerte, Gwen, Hass, Horshim, Reed, Sharwil, Stewart, Whitsell, on Topa-Topa, were planted at 6,5 x 5 m in 4 blocks (8 trees per block).

Observations have yearly dealt with:

- . • canopy volume;
- . • trunk enlargement (cm<sup>2</sup>), measured at 5 cm upon the grafting point;
- . • soil area covered by canopy;
- . • production amount (n° and kg/tree);
- . • production efficiency: 1. Production-amount (kg)/trunk-diameter; 2. production-amount (kg)/canopy-volume; 3. production-amount (kg)/soil-covered area by canopy;
- . • fruit weight and physical characteristics.

Due to the soil characteristics, trees have grown slowly. No iron chlorosis has been observed.

Varieties quickest to grow have been Bacon, Ettinger, Horshim.

Heaviest bearing cultivars have been Ettinger, Bacon, Horshim.

The best production-amount/trunk-area efficiency has been found on Ettinger, Gwen, Reed; while, for production-amount/canopy-volume efficiency, best results have been obtained on Gwen, Whitsell. Highest efficiency for production-amount/soil-covered area has been reached on Gwen, Whitsell, Bacon, Ettinger.

Average fruit weight was: 361,20 g (Reed), 309,57 g (Ettinger), 278,09 g (Fuerte), 276,87 g (Bacon), 276,76 g (Sharwil), 276,74 g (Whitsell), 260,29 g (Horshim), 259,85 g (Gwen), 255,36 g (Stewart), 217,45 g (Hass).

Highest pulp/seed ratio was: 6,67 on Sharwil, 6,31 on Reed, 5,75 on Stewart, 5,25 on Fuerte.