

## **ALLESBESTE NURSERY: BREEDING AND SELECTION IN SOUTH AFRICA – AN INTEGRATED APPROACH**

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The evaluation of imported as well as locally found by-chance selections are integrated with the evaluation of material from Allesbeste's own breeding programme. The programme is divided into three phases. Seedlings of open pollinated Hass were initially planted in the phase 1 block. Promising selections are top worked for further evaluation in the phase 2 block on stag horned Duke 7 rootstock trees. Selections with commercial value (from phase 2) are finally evaluated in semi commercial blocks. Seedlings of these promising selections (Hass phenotypes) are screened and reintroduced annually to phase 1. Promising selections identified are W1 (green skin); Q23, K6, I3, Q30, F1, F2, F3, H1f2, DA8, F5, Q19, O3, O2B, R1, D1, W4, C1, Q22 and Humor (dark skins). The season of C1 and Q22 are similar to that of Hass whereas D1 and DA8 are substantially later than Hass. C1 has a high precocity, produces high yields and can be manipulated to set an out of season crop. The harvest period of F1 can be delayed for several months. F5, W4 and D1 are similar to Hass in taste (nutty) and appearance. Q22 has a good flesh colour and texture with a unique and well-accepted sweetish taste. Q22 has an excellent shelf live. Humor shows very good storage abilities. Maluma Hass was the first to be released with full cultivar status from the programme. It outperforms Hass on production and count distribution. Allesbeste Nursery holds the plant breeder's rights for Maluma Hass under registration number ZA 20043215.