

The Planter, Kuala Lumpur, 99 (1166): 295-304 (2023)

Relationship between Fresh Fruit Bunch Production and Oil in the Bunch of Two Descendants of BM119 AVROS from IOI *Pisifera* Breeding Programme

MATHEWS J, NG S K, CHEW T D

IOI Research Centre, 2 km Gemencheh Batang Melaka Road, 73200 Gemencheh, Negri Sembilan Darul Khusus, Malaysia

AND

GOH H L

Pamol Research Station, 8½ Miles Jalan Mersing, 86007 Kluang, Johore Darul Takzim, Malaysia

This short paper analyses the performance of two AVROS descendants of BM119 oil palm. Two progeny testing DxP trials using pisifera descendant of BM119 from PORIM Kluang (PK754) and Ulu Dusun (UD33) laid out in 2009 in similar soil and adjacent to each other had performed differently for fresh fruit bunch (FFB) production and oil in the bunch (OB). Progenies of AVROS of PK754 crossed with Deli dura yielded significantly high FFB. However, UD33 yielded significantly higher OB when compared to PK754. There is a quadratic expression for families of progenies showing high FFB production, but relatively low OB and reverse was the situation for families exhibiting low FFB production and high OB. However, the mean total oil (kg) per palm per year in DxP crossed with both pisifera progenies were not significantly different. This indicates that some of the AVROS selected could have high FFB production, while others were high for OB. Somehow, the high FFB compensates the low OB in total oil production and vice versa in the two AVROS pisiferas studied.

Keywords: *Oil palm breeding, BM119, AVROS, pisifera.*