

Assessment of the agronomic performance of Malayan Yellow Dwarf × Vanuatu Tall coconut (*Cocos nucifera* L.) hybrid variety tolerant to lethal yellowing disease of Ghana in Côte d'Ivoire.

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ABSTRACT:

This article aims to study the agronomic performance of 18 hybrid progenies of coconut MYD x VTT and their parents VTT in Côte d'Ivoire. The evaluation was focused on the number of bunches per year (Nbb), the number of fruits per year (NBFR), copra produced per tree per year (Cop / tree / year) and per hectare per year (Cop / hectare / year). It appears from this work that the hybrids MYD x VTT produces 9 to 11 bunches and 76 to 121 fruits, per year with the weight of 12.54 to 19.82 kg of copra per tree and 2.01 and 3.17t of copra per hectare. These values are statistically equal to those of PB121⁺ used as a control in the study. Progenies of d₅, d₆, d₈, d₁₁, d₁₂, d₁₅ and d₁₈ give the best yields and similar to the control PB121⁺. VTT Parent produce an average of 11 bunches 96 fruits, and 11.62 kg of copra per tree and 1.66 t of copra per hectare per year. Parent G₁, G₄, G₆, G₇, G₁₂, G₁₅ and G₁₆ have the best yield. Heterosis effects were observed for copra tree (42.08%) and copra per hectare (50.04%). Parents that have better yields with best progenies can be selected for the seed production of MYD x VTT (tolerant and good yield). MYD x VTT hybrid results are advised to Ivorian and Ghanaian farmers to prevent expansion of this disease.

Keywords:

Hybrid coconut MYD x VTT, tolerant, productivity.

Abbreviations:

Nbb: Number of bunches per year, NBFR: Number of fruits per year, Cop/ tree / year: copra produced per tree per year, Cop / hectare / year: copra produced per hectare per year., MYD: Malayan Yellow Dwarf, VTT: Vanuatu Tall, WAT: West African Tall MYD x VTT : Malayan Yellow Dwarf cross Vanuatu Tall, MYD x WAT+ : Malayan Yellow Dwarf cross improved West African Tall, Bunch.