



PHALAENOPSIS BREEDING TO OFFER NEW GENOTYPES SUITABLE TO SOUTHERN VIETNAM

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Actually, *Phalaenopsis* orchid varieties are often introduced from abroad. They exhibited their poor adaptation to the conditions in Southern Vietnam. Breeding materials consisted of 20 introduced varieties, and two wild habitats *Phalaenopsis pulcherrima*. There were nine crosses, which regenerated green plants.

Of them seven hybrids exhibited their flowers and two (cultivar x wild species) without flowers. Pollination would not appear if wild habitat could be a male parent. However, pollination would be available if wild habitat could become a female and Thus the commercial orchid genotype must be a male. Morphologically, the hybrids offered the similar agronomical traits of their parents as leaf number, leaf dimension, plant height, blade width and length. Hybrids from wild habitat and commercial genotype regularly exhibited heterosis of these traits in comparing to mean values of their parents. Six promising lines were selected namely L1.1, L1.3; L4.1; L6.1, L6.2 and L6.3. 18-20 month old seedlings of the hybrids were grown in Di Linh – Lam Dong province. After 3.5-4.0 months, they highly produced first bloom with high flowering ratio and good quality stalks as compared to the other hybrids under condition of Ho Chi Minh city. Anthracnose spot disease (*Colletotrichum* sp.) and bacterium soft rot (*Erwinia carotovora*) seriously damaged *Phalaenopsis* orchids. The hybrids originated from *Phalaenopsis pulcherrima* exhibited their high resistance to the two pathogen agents.