## 2021臺灣國際蘭花研討會蘭科植物科技研發成果發表 Taiwan International Orchid Show Orchid Research Result Publication

技術/專利:珍奇類藍紫色蝴蝶蘭之育種 technology/patent: Breeding novelty blue-purple *Phalaenopsis* orchid 研發機關:農業試驗所 作者:曹進義、吳容儀、陳威臣、夏奇鈮 聯絡電話:04-23317325 E-MAIL:cytsao@tari.gov.tw

Organization: Taiwan Agricultural Research Institute Researcher: Chin-Yi Tsao, Uei-Chern Chen, Rung-Yi Wu, Chi-Ni Hsia Telephone: 886-4-2331-7325

摘要 Abstract

花辦組織之酸鹼值(pH)為影響蝴蝶蘭花朵藍紫色表現之主要因子之一,藍紫色花之pH值表現較其他花色偏鹼性,因此 以蝴蝶蘭花辦之pH值作為篩選親本之依據,再以此親本與藍紫色蝴蝶蘭雜交,觀察其後代花朵可成功表現出藍紫色。目前 已從雜交後代中選育出多個具有優良園藝性狀之藍紫色花單株,如小花多花、香氣、具有雙梗特性、有圓整花形、可低溫 催梗與雙梗的特性,具有商業應用潛力。

The pH value in the petal tissue is presumed one of major factors to affect blue-purple color appearance in flower of *Phalaenopsis*. Basing on this theory, pH value of *Phalaenopsis* flowers were analyze first for screening suitable parents as resources for breeding blue-purple color *Phalaenopsis*. Many seedling derived from hybridizations were evaluated and plants with excellent horticultural traits such as seedlings with multiple small flowers, fragrance, double stalks, beautiful round flower arranged orderly in the inflorescence and stalks which were able to induce in a cooling greenhouse were selected. All these traits were highly demanded for commercial production of *Phalaenopsis* varieties.



圖1. 選拔出多個具有優良園藝性狀之藍紫色花單株。(A-B) 雜交編號CYT142具有雙梗性與漂亮圓整花型,(C) 雜交編號 CYT22為具雙梗性之迷你花,可涼溫催梗,(D)雜交編號CYT177具有短幼年期特性,出瓶約4個月即可開花,(E)雜交編號 CYT134具雙梗特性且有濃郁香氣,(F)雜交編號CYT167具有亮黃色花瓣與藍紫色唇瓣之特殊色系且有濃郁香氣。 Figure 1. Many seedling derived from hybridizations were evaluated and plants with excellent horticultural traits. (A-B) Seedlings of CYT142 had double stalks and beautiful round flower, (C) CYT22 had mini flowers in two stalks which were able to induce in a cooling greenhouse, (D) CYT177 had short juvenile phase and it took only 4 month from deflasked to flowering, (E) CYT134 had a trait of double stalks and had flowers with strong fragrance, (F) CYT167 had special bright yellow color in the petal and a blue-purple color in the lip were observed on the flower and with strong fragrance.