

Characteristic of a new fragrance cultivar *Phalaenopsis*

Hualien Pink Apple ‘Hualien No. 1-Pink Apple’¹

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Abstract

In order to promote *Phalaenopsis* industry in Taiwan, breeding for excellent traits of new variety is necessary. In 2007, a breeding program of *Phalaenopsis* with fragrance in Hualien District Agricultural Research and Extension Station (HDARES) was conducted by hand pollination, in vitro seed germination, subculture, acclimatization, grex registration to the Royal Horticultural Society (R.H.S.) and DUS test for new plant variety. The variety right of the new *Phalaenopsis* cultivar Hualien Pink Apple ‘Hualien No. 1-Pink Apple’ was approved in 2015. The characters of the new cultivar are as follow, one to two flower stalks, fragrant and early blooming in 7.6 cm diameter pots. After transplanting in greenhouse, time to spike and flowering of *Phal.* ‘Hualien No. 1-Pink Apple’ was 66.3 days earlier than *Phal.* ‘KHM2232’ under nature condition. Spike and flower number and floret diameter of *Phal.* ‘Hualien No. 1-Pink Apple’ is more and larger than *Phal.* ‘KHM2232’. The fragrance components in flower of *Phal.* ‘Hualien No. 1-Pink Apple’ was analyzed by gas chromatography-mass spectrometry (GC-MS) and revealed to be ocimene, citronellol, citronellol acetate and nerol acetate. The genetic background of the scent from *Phal.* ‘Hualien No. 1-Pink Apple’ was related with its ancestors, *Phal. equestris*, *Phal. Stuartiana* and *Phal. schilleriana*.

Key words: hybrid, fragrance, pot-flower, cultivar

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