

Development of a New Seedless Watermelon Cultivar ‘Penghu No.8’

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Abstract

Seedless watermelon F₁ Hybrid cv. ‘Penghu No.8’ was released in November of 2012. The commercial name is ‘Red Lover’. This new cultivar was bred by crossing maternal KPHS925, an inbred line of tetraploid cultivar, with paternal KPHS30, an inbred line of diploid cultivar. The results of new line experiment, multi-locations trial and characteristics survey experiment from 2008 to 2011 showed that this new cultivar possesses several ideal characteristics, such as a good appearance, bright red flesh, high soluble solids content, tender flesh and excellent taste, high yield, long shelf life and good shipping quality. The new cultivar had an average fruit weight of less than 3 kg, suitable for consumption of small family. The yields in three season were 20.4, 14.0, and 22.6 ton.ha⁻¹, which increased 21%, 23%, and 44%, respectively, comparing to the control cultivar ‘Lihui’. The total soluble solids content achieved 13°Brix, 2°Brix higher than that of the control. Breeder’s right of ‘Penghu No.8’ was certified 20 years by Council of Agriculture (C.O.A.), Executive Yuan, ROC in 2013. (certificate No.A01384)

Key words: seedless watermelon, F₁ hybrid cultivar, soluble solid .

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