Development of Peanut Variety Hualien No.1 [1]

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Summary

A new peanut variety Hualien No.1 has been developed and released by Hualien DAIS in 1997. This variety was derived by using the single-seed descent method from a cross between Tainan S.9 and ICG (FDRS)-46 at spring crop in 1987. The final single plant selection was made in F_5 generation and Hualien No.1 was evaluated in series of tests during 1990~1992 at the experimental field of Hualien DAIS, and at the major peanut production area in Hualien under the designation of HL76-14. In addition, Hualien No.1 was evaluated in regional yield trials around the Island during 1994-1995 for its yield potential and stability under the designation of Hua-Yu No.2.

Hualien No.1 is Spanish type peanut with erect growth habit and required approximately 120 to 130 days and 105~115 days to harvest, respectively, in the spring and fall environments in Taiwan. It has two-seedes pod with medium cylindrical shape, constriction and reticulation. The pod size is 2.88 cm x 1.30 cm, and the kernel size is 1.46 cm x 0.81 cm. The 100-pod weight is 147.5~154.5g and the 100-kernel weight is 60.1~63.1g. Hualien No.1 possess high yield potential and the average pod yield is 3411 kg/ha in the spring crop and is 2807 kg/ha in the fall crop. The average kernel yield are 2370 and 1934 kg/ha in the spring and fall crop, respectively. Oil and protein content are 47.8~48.2% and 30.9%, respectively. Hualien No.1 has higher resistance to rust and leaf spot than the commercial cultivar Tainan S.9 and tolerance to leaf chlorosis in the field condition.

（Key words: Peanut (*Arachis hypogaea* L.）, Variety improvement.）

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