

## **Development of Peanut Variety Hualien No.2<sup>1</sup>**

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### **Summary**

A new peanut variety Hualien No. 2 has been developed and released by Hualien DAIS in 2003. The commercial name is called 'Sann-Ngeh-Kong'. This variety was derived by using the single-seed descent method from a cross between F<sub>1</sub> (Tainan sel.9 × H.I. 9302) and Hua-Yu No. 1 at spring crop in 1994. The final single plant selection was made in F<sub>5</sub> generation and Hualien No. 2 was evaluated in series of tests during 1997~1999 at the experimental field of Hualien DAIS, and at the major peanut production area in Hualien under the designation of HL 83-05. In addition, Hualien No. 2 was evaluated in regional yield trials around the Island during 2001-2002 for its yield potential and stability under the designation of Hua-Yu No. 12.

Hualien No. 2 is a Valencia 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 in Taiwan. The pod size is 4.55 cm x 1.39 cm, and the kernel size is 1.58 cm x 0.91 cm. The 100-pod weight is 209~224g and the 1000-kernel weight is 64.3~68.4g. Hualien No. 2 possess high yield potential and the average pod yield is 2972 kg/ha in the spring crop and 2421 kg/ha in the fall crop. The average kernel yield are 2103 and 1645 kg/ha in the spring and fall crop, respectively. Oil and protein content are 52.9~53.3% and 24.7~25.7 %, respectively. Hualien No. 2 has higher resistance to rust and leaf spot than the commercial cultivar Tainan No. 11 in the field conditions.

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

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