

# **Influence of Plant Spacing on Yield and Yield Components of Angular Sponge Gourd under Simple Plastic Structure in Penghu**

**S. C. Shih<sup>1</sup>**

## **Abstract**

In 1996 and 1997, a new strain KPH84-4 and local variety KPH8643 of angular sponge gourd (*Luffa acutangular* (L.) Robx) were grown in 1.1-m rows with three within-row spacing, i.e., 0.9, 1.2, and 1.5m under simple-structured plastic house (L x W x H=22m x 4.5m x 2.5m) in Penghu. The aim was to study the effect of planting density on yield and yield components of angular sponge gourd in protected house. Total fruit yield, marketable fruit yield and fruit weight are involved to estimate their gross return of each spacing treatment. The result indicated that total and marketable fruit yields of KPH84-4 was higher than that of KPH8643, and yield and yield components was better in 1997 than in 1996 .

No significant difference in numbers of fruits, average of fruit weight, fruit length and fruit width were detected among the spacing treatments, However the yield increased with increasing plant population. Higher gross return was found at higher planting density. It suggested that proper plant spacing is around 760 plants/0.1ha (spacing apart 1.1m x 1.2m).

Key words: angular sponge gourd, space, yield, yield components

---

<sup>1</sup>Assistant Agronomist of Penghu Substation, Kaohsiung DAIS.