

#### Abstract:

In tropical climates such as Indonesia, asparagus growth does not have any dormant period. The high temperature throughout the year maintains high rates of plant growth and consequently reduced long term plant productivity. The objective of this experiment was to find the best combination of harvest method and schedule to maximize spear yield and size of green asparagus during a 20 week harvest period in the rainy season. The harvest methods tested were : a0 (without mother stalk (MS)), a1 (with one MS) and a2 (with two MS). The harvest schedules were : p1 (4H – 8R – 8H), i.e. 4 weeks harvesting, 8 weeks rest and 8 weeks harvesting, p2 (6H – 8R – 6H) and p3 (8H – 8R – 4H). The best harvest schedule depended on the harvest method. Harvesting without MS increased the number of spears, but spear size decreased rapidly, so this method produced a lower percentage of marketable yield. Harvesting with one MS slowed down spear size decrease, so that the average spear size produced was larger than in harvesting without MS. Combining this method with the p2 and p3 harvest schedules produced significantly better spear size. Harvesting with 2 MS also produced better spear size but fewer spears and lower yield when combined with harvest schedule p1.