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Studies on adventitious root formation and leaf quality of *Piper betle*. L (Betel) as affected by different support sticks

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Piper betle is a root climber, and supporting sticks are needed for the commercial cultivation. *Memecylon rostratum* Thw. (Kooratia) sticks are very popular among the betel farmers because of its durability and surface roughness of the stem. These sticks are transported from a distance area. High in price of each stick affects for cost of production.

The export trend of betel is being gradually increased in the recent past, and the extent of cultivation also increased simultaneously. This has affected positively on demand and price of the sticks. Being an export crop, maintenance of leaf quality is also important.

Therefore, the main objective of this study is to find a more suitable alternative support, to attain a high rooting ability and leaf quality. In this study, four different supports were used. They were the sticks of *Memecylon rostratum* Thw. (Kooratiya), *Tectona grandis* L. (Teak) *Gliricidia sepium* L. (Gliricidia) and coir roap. This experiment was conducted in early 2005. Four treatments were arranged in a RCB design with three replicates.

Initiation of adventitious roots on the support and leaf quality was observed and it clearly showed that number of primary and secondary roots per node is significantly higher when betel grown on teak sticks. High quality betel leaves were obtained when teak and Kooratiya sticks were used compared with other supports.