

# COCONUT BUNCH SUPPORT



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**CENTRAL PLANTATION CROPS RESEARCH INSTITUTE**

**KASARAGOD 670 124**

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## COCONUT BUNCH SUPPORT

### Introduction

Partial severing of the stalk from the trunk is known as buckling. A large number and/or big sized nuts, long and less sturdy peduncle, wider angle between the leaf and the inflorescence, and weak leaf petiole are some of the causes for buckling of bunches. This phenomenon is more common among the high yielding varieties and hybrids of coconut during the early years of bearing up to 25-30 years. The loss of nuts in the hybrids Tall  $\times$  Dwarf and Laccadive Ordinary  $\times$  Gangabondam, and the varieties like Laccadive Micro, Dwarf Orange, and San Ramon is quite high due to buckling.

### The Bunch Support

To prevent the coconut bunches from buckling, a mechanical support has been developed which consists of a trunk-clamp, support-clamps and telescopic support-rods (Fig. 1).

The trunk-clamp is made in six different sizes to suit varying trunk girths. Support-clamps can be placed at any point on the trunk-clamp. Telescopic support-rods are made in two different sizes of 60-100 and 100-140 cm to suit bunches located at various heights and positions on the crown.

### Fixing the Support

The support can easily be fixed on the trunk of the palm either by standing on the ground (if the palm is short) or with the help of a ladder (if the palm has grown tall). After fixing the trunk-clamp and support-clamps on the trunk, the length of the

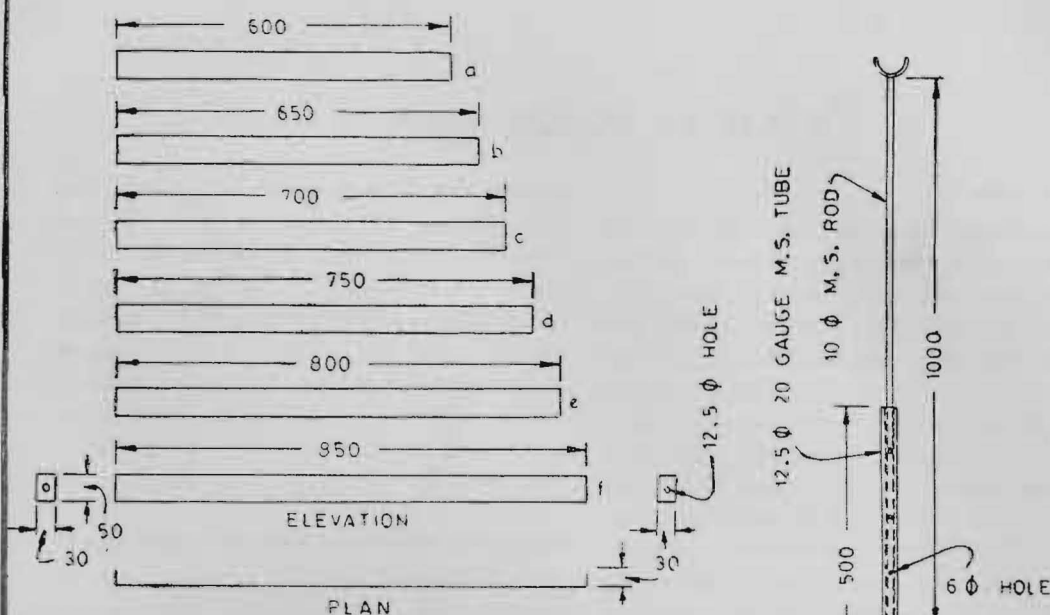
support-rod for each bunch is adjusted. The fork end of the support-rod is inserted towards the tail end of the bunch (about one-fourth distance from the tip) to support the peduncle. The rod is slightly lifted up and the other end of the rod is inserted in the support-clamp hole. One man can easily do the operation, and it is possible to support as many as 6 to 8 bunches at a time (Fig. 2).

### Harvesting of Nuts and Refixing of the Support

Harvesting of nuts can be done without removing the support-rod by severing the nuts first and the stalk last. After the nuts from the bunch are harvested, the support-rod can be taken out and used for another bunch that might require support. As the palm grows taller, the trunk-clamp has to be refixed at a higher level. Before removing the trunk-clamp which is already fixed, another is fixed above the old clamp. The bunch already under support is then provided with another support-rod and the clamp, support fixed to the new trunk-clamp. The old ones can be removed and used for some other palm. This operation may be necessary only once in two years.

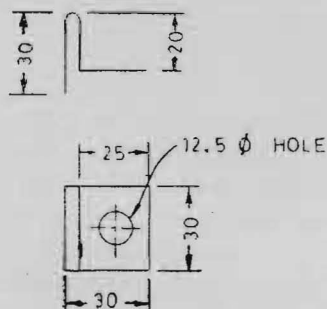
### Advantages

The support will obviate the need for frequent climbing of coconut palms to prevent heavy bunches from buckling. The device is a safe and economical method of preventing buckling of coconut bunches and dropping of immature nuts from such buckled bunches.

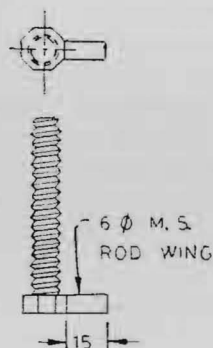


SIX SIZES OF TRUNK CLAMP  
(20 gauge G.I. sheet)

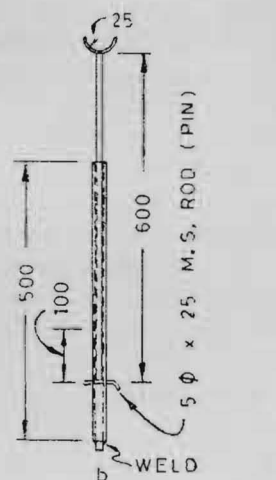
- a. 60 / 65 SIZE
- b. 65 / 70 SIZE
- c. 70 / 75 SIZE
- d. 75 / 80 SIZE
- e. 80 / 85 SIZE
- f. 85 / 90 SIZE



SUPPORT CLAMP  
(20 gauge G.I. sheet)



10 x 63 FULL THREADED BOLT AND NUT



TELESCOPIC SUPPORT ROD

- a. 100 / 140 SIZE
- b. 60 / 100 SIZE

ALL DIMENSIONS ARE IN MM

Fig. 1. Components of coconut bunch support

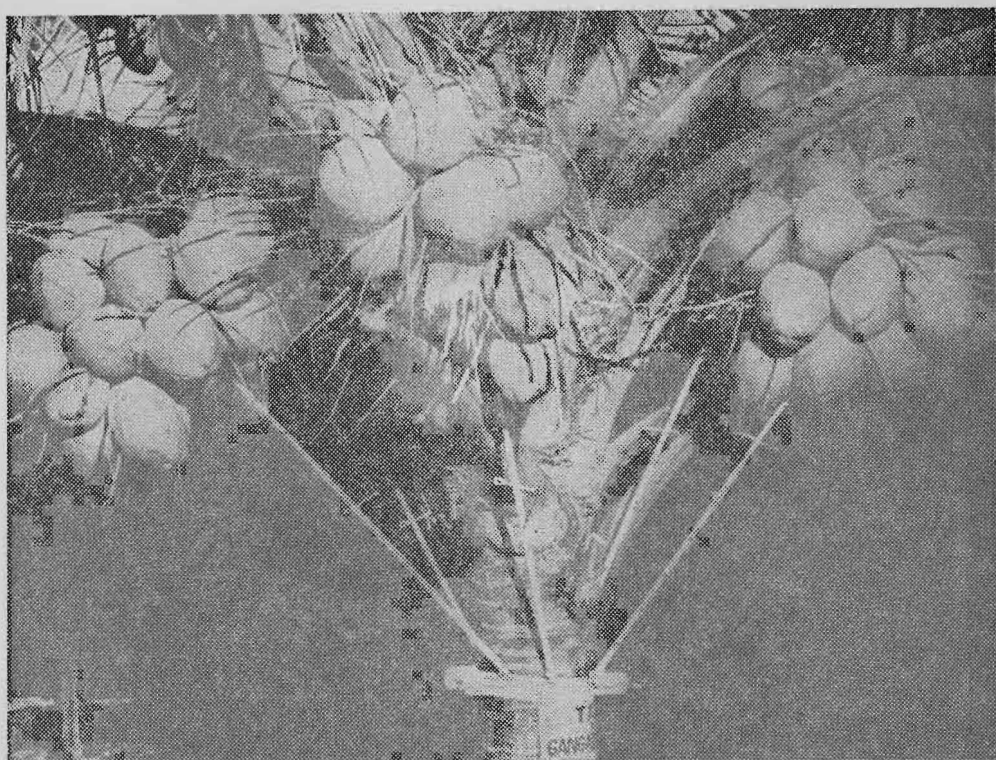


Fig. 2. The device supporting heavy bunches on a young coconut palm