Tree Climber

Innovation Catalogue
National Innovation Foundation - India

Innovator
M J Joseph alias Late Appachan

Address
Son (Mr. Akhil Appachan), St Mary's Indl Complex & Research Centre, Puranjan, Chemperi, Po Kannur, Kerala – 670632

Contact Details
Ph: 0460-2212104
Mob: 9400412104

Problem addressed:
As reported by Coconut Development Board, coconut Tree climbers are a rarity these days in Kerala and other coconut growing states of Karnataka, Tamil Nadu, Andhra Pradesh, Maharashtra and Goa, with very few taking on the traditional profession. There is a reluctance to enter this field because of the occupational risk and the arduous labor involved in climbing tall coconut trees. Due to scarcity of labor as against the general norm of harvesting cycles of 45-60 days, farmers are currently able to harvest only once in three to four months.

Product:
A simple, safe, easy to use device for any season and by any person, cutting down the climbing time to 1-2 minutes for a 40 m tree as against 4-5 minutes traditionally required. It is available in iron and as well as steel body, though there is no difference in working or size.
The palm climber consists of two metal loops of 10 mm MS rod having sub-loops, rubber belt, wire ropes, connecting clamp, MS plates etc. One loop is intended for the right leg and the other for the left leg. These are called right leg loop and left leg loop respectively, the left loop (main loop) being slightly bigger than the right loop. The top of the main loop is bent forward to form handle and just below this part, two metal plates are attached with holes with a long rubber belt. On the rubber belt a wire rope having rings on each end is fixed. The bottom most part is a plate and a clamp is provided above it. A long holed plate is fixed on the main loop, which is used as parking brake.
Ropes attached to the climber are used to fasten it to the palm. The ropes pass around the tree and through hooks provided in the climber. A pedal is provided for resting the foot. Raise the right side peddle a little upward so that the grip of the right hand part of the climber will become loose facilitating upward movements by using the right hand and the right leg. Once the right part is moved up the weight of the body rests on the right hand part of the climber. The whole process is repeated for the left hand side. In this way one can easily climb coconut or areca nut palms.
### Technical Specifications

The palm climber consists of two metal loops of 10 mm MS rod having sub-loops, rubber belt, wire ropes, connecting clamp, MS plates etc. Dimensions of the equipment: 116 X 34 X 13 (cm) 
Applicable for Tree Diameter of: 15-32cm  
Material: Iron / MS steel, steel rope wire and rubber pad.  
Weight: 7.9 kg (Iron body)

### Key Competitive Advantage:

- To safely climb on tall palms to pluck fruits and apply pesticides  
- Alternate application: As a climbing device for electric post  
- Steel wire belt for safety

### Time to deliver:

10 days

### Price:

- Iron body: Rs 2,500/- (The price does not include transportation costs, taxes, etc.)  
- Steel body: Rs 5,000/- (The price does not include transportation costs, taxes, etc.)  

### Achievements:

Innovator has been awarded in the Second National Innovation Award Function in 2002 by National Innovation Foundation.

### IPR Status:

India Patent No. 194566

### BD website link:

http://nif.org.in/innovation/tree_climbing_device_appachan/495

### For Business Enquiries, please contact:

Business Development, National Innovation Foundation – India  
Satellite Complex, Nr. Mansi Cross Roads, Satellite Ahmedabad -380 015, Gujarat, India  
Phone: +91-79-2673 2456, 26732095; Fax: +91-79-2673 1903  
E mail: bd@nifindia.org, Web: www.nif.org.in