

Research Accomplishments

a) Varieties Released

- Navile-1 (Tunga) a high yielding sesamum variety was released from the station, yields 30 per cent higher than any local varieties. It is a less shattering variety having tolerance for leaf spot disease.
- KST 28 (Sahyadri) a high yielding FCV tobacco variety which is superior to KST-19 in both cured leaf yield and top grade equivalent and relatively drought tolerant producing 24-25 curable leaves. It is moderately resistant to black shank and tolerant to root-knot nematodes.
- KST 19 (Thrupthi) a high yielding FCV tobacco variety which is superior to FCV Spl in both the cured leaf yield (41% higher) and top grade equivalent (65% higher) has been developed and released from the station. It has tolerance to drought, black shank and root-knot nematode.



Research accomplishments

a. Varieties/Equipments released

1. Castor hybrid variety HCH-6 for zone-4 (Hiriyur)



Design and modification of groundnut power operated decorticator-M-6 for zone-4 (Hiriyur)



2. Design and modification of groundnut Pod Grader for zone-4 (Hiriyur).



3. Design and modification of groundnut power operated decorticator-M-4A for zone-4 (Hiriyur)



4. Under Inland Fisheries, developed technology on polyculture of fish with Freshwater Prawn (Scampi) 3000 kg/ha/yr) and rearing of spawn to fingerlings production in rural seasonal water bodies and farmers ponds (up to, found to be successful in livelihood improvement of farmers through employment creation and income generation.



Research Accomplishments

a. Variety released

Mudigere -1: It is a clonal selection from prostrate type of Malabar type. Capsule size is medium, oval shape and it is pubescent type. The dry capsule yield is 500-600 kg/ha under intensive management.



Mudigere -2: It is a clonal selection from Clone-683 of Malabar type. It is a non-pubescent, capsules are round in shape, medium bold, pale green turning golden yellow on ripening. Dry capsule yield is 650-700 kg/ha under intensive management.



Mudigere-3: It is a clonal selection from Clone-692 of Malabar type. It is a non-pubescent type. The capsules are oval /oblong in shape, bold, light green turning pale yellow on ripening. Dry capsule yield is 850 kg/ha under intensive cultivation (Released during 2010 for commercial cultivation)



- The Spawn/fry of Indian Catfish (*Clarius batrachus*) has been reared on different stocking densities with various kinds of feed, showed better performance with pelleted feed with incorporation of Vit B. complex (500 mg/kg) and Vit C. (400 mg/kg) feed and survival rate of 70 per cent. Further, the study in polyculture with carps, the catfish performed better and contributed 30 per cent of the total production of fish.



- **Brahmavar model paddy weeder** is best suited for weeding in row and SRI method of paddy transplanting. It has been designed for weeding paddy fields especially for coastal and alluvial soils. The drudgery and cost of equipment were lesser than that of Cono weeder and traditional/hand weeding. The cost of operation and field capacity were found to be Rs. 667/acre and 0.30 acre per day, respectively.



- Currently weeding by Cono weeder and traditional method require more drudgery, labour and time. Since, the circumference of the improved **Single row Karavali weeder** is more and also it is light in weight, the drudgery and time taken for weeding is lesser than the Cono weeder. The cost of operation and field capacity were found to be Rs.400 per acre and 0.50 acre per day, respectively.



- Weeding an acre by traditional method requires 15 man days, whereas Cono weeder requires 4 man days. The operational cost and time required for weeding using **Double row Karavali weeder** is lesser compared to Cono weeder and this device is best suited for weeding in machine transplanted paddy fields. The cost of operation and field capacity were found to be Rs.250 per acre and 0.80 acre per day, respectively.



Research accomplishments

a. Varieties released

Ullal-1: This variety was released during 1984-85. It flowers from December to March. Then mean yield is about 19 kgf/tree depending on age and maintenance. The nut size is medium (6.6 g) and shelling percentage is 30.70. The fruits are yellow in colour and it is a late season variety.



Ullal-2: This was released during 1984-85. The plants are bushy type and gives an average yield of about 18.50 kg/tree depending on age. The nut size is around 5.9 g and shelling percentage is 30.50 and it is an early variety. Fruits are yellowish red.



Ullal-3: This was released during 1993-94. It gives an average yield of about 15 kg/tree with shelling percentage of 30.00. Average nut sizes is 7.0 g. It is an early variety and fruits are red in colour.



Ullal-4: This variety released during 1994-95. It gives an average yield of about 9.5 kg/tree. It is also early variety. The nut size 7.1g.



UN-50: This was released during 1995-96. It gives an average yield of about 9.5 kg. Nuts are bold (9.0 kg) with shelling per cent of 32.75.

