

BRAHMAVAR

Zonal Agricultural and Horticultural Research Station,
University of Agricultural and Horticultural Sciences (UAHS), Shimoga
Karnataka

The center was initiated in the year 1985 with the mandate to develop and evaluate rice germplasm/breeding lines to meet the requirements of farmers of coastal zone of Karnataka. It is presently under UAHS, Shimoga. Evaluation of rice lines against biotic stresses with special reference to gall midge is another focus area.



Major contributions to AICRIP

Crop Improvement

Plant breeding - Varieties developed/ released



KCP-1

- Suitable for Coastal zone of Karnataka as it has best character, better grain yield, good straw yield, red rice, suitable for par boiling etc.
- Medium duration variety, matures in about 130-145 days
- Long bold grain with a test weight of 24.5 g. Yield potential is 6-6.5 t/ ha

Champaka (IET - 14758) was released with moderate tolerance to Gall midge and Blast, medium duration (125 to 130 days), suited for mid land situation, red kernelled and performed well under rain fed condition in the farmers field with yields 45 -50 qtls/ha.

• Nomination of **IET-14845** paddy variety which is suitable for Lowland situation having high yield, better straw yield, good par boiling character as compared to Phalguna existing variety.

• Varieties in pipeline:

1. MO-4 selection
2. Red rice variety resistant to pest and disease(MO-11,MO-12 and MO-13)
3. Red rice variety short duration (MO-15)
4. White rice variety for summer

Crop Production

- Integrated nutrient management in rice- Six year study indicated that significant highest sustainable grain and straw yield was recorded in 50% N through FYM (RNB) + 50 % through inorganic source.
- Integrated nutrient management (Organic farming) long term trial - Sixteen year long term study indicated that 50 % recommended NPK with 50 % recommended compost showed significant increase and stabilization in yield compared to NPK alone without affecting soil parameters.
- Large scale evaluation of manually operated drum seeder and power operated transplanter - Studies indicated that machine planting and drum seeder sowing proved better than direct seeding and random planting both in kharif and rabi and it is on par with line planting and also requires less labour.
- Effect of Rice Hull Ash (RHA) on Phosphorus utilization in paddy soils showed application of rice hull ash with different sources of phosphorus on grain yield of paddy differ significantly.
- Application of 72 kg of nitrogen in four splits (7.2 kg N at sowing + 28.8 kg N at early tillering + 18.0 kg N at active tillering + 18.0 kg N at panicle initiation) with recommended P & K increased the grain yield of drum seeded rice.
- Application of RHA at 2 ton/ha along with recommended NPK (P as rock phosphate) found to be superior in increasing the rice yield.
- Split application of potassium @ 60 kg/ha in three equal splits, at basal, 25 - 30 and 50 - 55 days after planting along with nitrogen for transplanted rice in midland and lowland conditions was found to give higher yields and monetary returns as compared to recommended practice.
- Weed management in sprouted rice in coastal zone found that use of Pyrazosulfuron ethyl 10 WP 250 g /ha at 3 DAS in drum seeding or broadcasted rice gave higher yield and monetary returns compared to other weed management practices.