AICRP ON CHICKPEA

AICRP on chickpea was started at Kalaburagi in the year 2001 with an aim to serve the farming community of this region by conducting need based research and its extension to farmers door step. Presently there are three (3) scientists working in this scheme belonging to Plant breeding, Agronomy and Plant pathology. The centre is also doing research voluntarily on Agricultural Entomology, Agricultural Microbiology and Plant Physiology. The QRT team categorized the AICRP chickpea, Kalaburagi centre as "Good Centre" during 2015.

Among the significant achievements, **six** chickpea varieties were released and among them two varieties are recognised as national checks (MNK1 (ELSK) and GBM-2 (MH)). Variety JG-11 is adopted and it is the ruling variety from 2005 and still it covers more than 50 per cent of the chickpea area in our state. It ranked first for our seed production chain from last 10 years. BGD-103 variety is the second most preferred variety and covers more than 20 per cent area and is the first kind of variety for Desi table purpose and has the highest protein.

Developed more than 15 important crop production technologies. Among them seed treatment with $CaCl_2 @ 2\%$ for drought mitigation, weed management with pendimethalin 30 CS @ 0.75 kg a i / as pre emergent, and irrigation at flowering and pod filling are very important. Foliar spray of micronutrient mixture (ZnSO₄ EDTA @ 0.5%, FeSO₄ EDTA @ 0.1% Boron 0.2%, and Ammonium Molybdate @ 0.1%) which are most crucial for yield improvement

The centre developed many technologies for disease management in chickpea. Among them Seed treatment with trichoderma @ 4 g /kg of seed along with soil application of 1 kg trichoderma enriched with 100 kg FYM and 20 kg Neem Seed Kernal Powder was found to be most effective in the management of wilt /root rot complex in chickpea which helped to increase chickpea yield.

Screened and developed Bio-intensive IPM modules (sowing of both sunflower abd sorghum seeds @ 50 g each per ha, broadcasting of puffed rice @ 3 kg / ha at 50 % flowering to enhance bird predation. Spray of chlorantraniliprole 18.5 SC @ 0.15 ml or Emamectin benzoate 05 SG @ 0.2 g or Flubendamide 480 SC @ 0.1 ml / 1 found to be improving the yield by effectively controlling the pod borer.

Isolated and Developed efficient *Rhizobium* and PSB strains for using as seed treatment/soil application. These are very cost effective and easily adoptable technologies and have spread more than 50% of the cultivable area.

Developed few technologies for drought mitigation and yield improvement. Among them use of growth regulator (NAA @ 20 ppm) at flowering for increased seed yield in chickpea and Foliar spray of growth regulators (Nitrobenzene @ 1ml/l or Tricantonol @ 1 ml/l at flowering) are important for higher yield of chickpea

Sl.No.	Name	Designation	Correspondence address
1.	Dr. D. H. Patil	Scientist (Agronomy) & Scheme Head	Email : <u>dhpatil_uas@rediffmail.com</u> Cell : + 91 95359 01939
2.	Dr. Mallikarjun Kenganal	Scientist (Plant Pathology)	Email : <u>mallikarjun_nss@rediffmail.com</u> Cell : + 91 9845364708
3.	Dr. Laxuman	Scientist (Plant Breeding)	Email : <u>laxumanc@uasraichur.edu.in</u> Cell : + 91 80086 44224

Present staff position of AICRP on chickpea