

NARC-2011: High yielding & Ug99 resistant wheat variety for irrigated area



Wheat Variety: NARC - 2011



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Challenge

- Rust (leaf, stem and yellow rust) is the main threat to wheat productivity in the country.
- In past the losses to wheat productivity were up to 15% due to rust epidemic.
- Challenge was to develop high yielding wheat varieties resistant to Stem rust including (Ug99), Leaf rust and Yellow Rust, to sustain productivity.

Interventions

- During 2006-07, wheat germplasm of diverse origins was acquired from CIMMYT.
- PARC evaluated this material through standard breeding procedures for five years.
- Utilizing its Summer Wheat Station facility at Kaghan, PARC geared-up the evaluation process including shuttle breeding.

Outcomes

- In 2011, PARC developed NARC-2011 wheat variety which is a high yielding and resistant to all three rusts with special reference to **Ug99**.
- It has produced 7.2 tons/ha in National Uniform Yield Trials under irrigated conditions.
- During 2008–10, in the national trials it has shown resistance against yellow rust and leaf rust (RRI of 7.4 – 9).
- CIMMYT data have also showed that it is resistant against (potential threat of) stem rust race Ug99.
- The variety has been released for cultivation in irrigated areas after approval of Punjab Seed Council.
- It suits irrigated areas, matures in 159 days and has amber seed color.
- The variety has good quality traits i.e. suitability for chapatti making and has 12.3% protein content.

Way Forward

- Up-scaling the seed multiplication through contractual production system for accessibility to farmers.
- Popularizing the variety through field demonstrations.