

PROJECT WISE OBJECTIVES & FUTURE GOAL, WRS, NAU, BARDOLI

B.H.12004-01- Research in Wheat

Objectives:

- I. To develop an early maturing high-yielding variety which can be fit in Rice-Wheat Crop Sq. Taken after paddy by late sown in the irrigated condition of south Gujarat
- II. To develop high-yielding, terminal heat tolerance, Rust disease-resistant wheat for the south Gujarat region
- III. Screening of high-temperature tolerance culture of the Wheat crop for South Gujarat

Future Goal:

A. Crop Improvement:

1. Development of high-yielding and high-temperature tolerant wheat varieties by using wheat germplasm in the crossing program and developing a new hybridization program every year.
2. Strengthening of wheat genetic resources which include collection, evaluation, characterization, and maintenance of germplasm for making use in the future breeding program.
3. Planning to conduct varietal evaluation trials (PET/SSVT/LSVT) for state-level late sowing of wheat in the Rabi season and multi-location varietal evaluation trials of paddy and other crops in Kharif
4. Wheat Seed Production Programme
5. Seed multiplication of different varieties in various classes such as breeder, foundation, certified, and T. F. L. of different varieties on large scale to cater the need of farmers and various seed producing agencies.

B. Resource Management:

1. Increase wheat productivity through improved cultural and resource management practices
2. Conduct the experiments to develop new POP and Resource Management practices against the challenges of climate for higher production and income in wheat crop for south Gujarat regions.

C. Extension:

Dissemination of the newly developed varieties and technologies through Front Line Demonstrations/Agriculture fair/farmers day/field day/kishanghosti/training by FTC & ATMA

B.H.-12123-Development of Climate-Resilient High-Yielding Cucurbits Varieties for South Gujarat

Objectives:

- I. Development of climate-resilient high-yielding varieties/hybrids in cucurbitaceous vegetable crop
- II. Development of hi-tech nursery and supply of quality seedlings of best varieties/hybrids of vegetables and cucurbits crops to the farmers of south Gujarat
- III. Developed hi-tech production technologies of cucurbits, other introduced new hi-value vegetables crops under protected cultivation and transfer technologies, advanced skill with the farmers

Future Goal:

1. Characterization of Germplasm of cucurbits, development hybridization program, evaluation promising cucurbits entries under multilocation trial (SSVT/LSVT), and best entry released by SVRC/CVRC and notified as varieties/hybrids
2. Under poly house/net house produce quality seedlings using standard scientific methodologies (plug trays methods) for seedling preparation under controlled environments
3. Under a protected structure with controlled environments laid out scientific experiments regarding screening of varieties/hybrids of Hi-value crops, to develop precise fertigation, irrigation methods, and recommended fertilizer doses, INM, IDM, and IPM models under protected cultivation

Expected output

1. Releasing climate resilient high-yielding varieties/hybrids in cucurbitaceous vegetables for commercial cultivation in South Gujarat
2. Supply of best quality vegetables and cucurbits seedlings to farmers of south Gujarat based on evaluation of best-suited released varieties/hybrids (public or private sector)
3. Recommendation Hi-tech production technologies of cucurbitaceous vegetable, tomatoes, melons, cherry tomatoes, and other introduced new hi-value crops under protected cultivation and transfer technologies, advanced skills with the farmers by FLDs to doubling farmers income

Expected Benefits in Economic Terms

1. Generate income by selling quality vegetable seedlings to farmers
2. Provide good quality vegetables and cucurbits seedlings to farmers, as per choice of promising varieties/hybrids which saves time, money, and effort for the small land-holding farmers of south Gujarat
3. Development of technology under protected cultivation and new high-yielding cucurbits varieties which increase yield and income per unit area