

Breeding and Development of Bentgrass

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Goals:

- Develop stress tolerant bentgrass cultivars with specific emphasis on heat tolerance, root growth characters, turf quality, and resistance to natural disease and insect pests.
- Continue genetic studies involving heritability and stability of biological traits associated with stress tolerance.

CRENSHAW (Syn3-88) and CATO (Syn4-88) were released in April 1993. Considerable success has been realized in the performance and utility of both grasses, especially throughout the southern United States.

CATO has been licensed to Pickseed West, Tangent, Oregon and was placed into production in September 1993. Commercial seed stocks will be available in 1994.

CRENSHAW has been licensed to Lofts Seed, Inc., Bound Brook, NJ and was placed in production in September 1993. A limited quantity of seed was available for commercial distribution in 1993.

Syn1-88 seed was harvested from a 5 acre production field in August 1993. Seed production was approximately 550 pounds per acre and will be used in experimental plantings in cooperation with other universities and golf courses. Syn1-88 was evaluated extensively in California and West Texas for salinity tolerance under field conditions.

Five additional elite bentgrass breeding lines were increased in 1993. These new varieties were developed specifically for improvements in heat tolerance, root growth characters, disease resistance, turf quality, persistence and competitive ability. Syn92-1, Syn92-2 and Syn92-5 were included in the National Turfgrass Evaluation Trials (NTEP) trials along with Syn1-88. Both CATO and CRENSHAW were sponsored by their respective licensees.

Vegetative selections were identified in the Oregon seed production fields among the progeny of advanced lines. These selections will be evaluated for growth characters, turf quality, disease and insect resistance, traffic and salinity tolerance, heat tolerance, and root growth.