1996 TURFGRASS AND HORTICULTURAL TRIALS RESEARCH REPORT

R. Smith, Ph.D., Extension Horticulturist and Turfgrass Specialist NDSU Department of Plant Sciences, Fargo, ND

INTRODUCTION:

Each year in the past has brought its own unique set of challenges, and 1996 was certainly no different. Accepting the task of assisting with the installation and establishment of the sod at the new baseball stadium on the NDSU Fargo campus, I quickly found that, if anything could go wrong, it did. Suffice it to say at this point, things turned out all right, thanks to the efforts of many people, too numerous to mention here. It was completed by the deadline because of full cooperation by all involved; no one's ego outgrew its normal bounds.

This year, I was again fortunate to have the help of Deanna Haberman and Barb Laschkewitsch with the work of planting flowers and vegetables at the test sites around the state. Again, we had good fortune of competent help at the Carrington and Dickinson stations, with strong support from the respective superintendents, the summer helpers, and Jerry Larson, the county agent in Dickinson. We were able to get some excellent plantings and evaluations made in all areas -- turf, flowers, and vegetables.

Through the haze of almost perpetual exhaustion, we organized the Turfgrass Field Day once more, with many dedicated exhibitors coming a good distance from the Twin Cities to show off their equipment to a small number of attendees. Continuing of this field day with this low turnout is in question, to be decided at the Annual Conference in January. The fields benefit from the attention given to it by the Cushman GA60, and this year the Aerway aerifier, but it is disappointing to witness the lack of interest in the NCTAGA membership. If there is a genuine disinterest in this endeavor, then we will let it die a natural death. I was please to see Tina Westering, NCTGA's new Executive Director, make it to the field day and lend her enthusiastic support.

I would like to conclude this introduction by saying that I am extremely proud of my wife, Betsey, NCTGA's first Executive Director. She worked unbelievably hard for the Red Hawks baseball club this year, helping to install the sod under a totally unrealistic deadline, and tolerating a tough learning curve in managing the field maintenance for a winning ball club in their maiden year!

FARGO, DICKINSON, AND CARRINGTON TRIAL SITES

The results of our efforts carried on at these stations this year yielded excellent results.

The 'Purple Wave' petunia again showed excellent coverage this year, with each plant spreading anywhere from 24 to 36+ inches. The only thing that appears to stop it is the autumn frosts. This and the series that will follow should be very popular with the gardening public, if the price doesn't get out of line. Thompson & Morgan, the major purveyors of the "Wave" seed lines, shows their new introduction for 1997, the 'Pink Wave' selling 10 seeds for \$2.19. With over 200,000 petunia seeds per ounce, one could stand to make quite a bit of \$ from just a small production. Anyway, we will be trialing that one next year to see if it performs as well as its predecessor.

Other flower plantings that were rated as outstanding are:

Ageratum 'Neptune Blue' Alyssum 'Cheers' and 'Wonder White' Dianthus 'Princess Crimson' Lisianthus 'Echo Mix' and 'Tiara White' Nicotiana 'Havanna Red' Nierembergia 'Mt. Blanc' Petunias 'Pink Morn', 'Chiffon Morn', 'Lavender Storm', 'Carmen', 'Rose', 'Purple Wave' Rudbeckia 'Indian Summer' Vinca 'Apricot Delight'

Several of the marigold cultivars were slow in flowering this year due to the cold, wet start of the spring, but responded beautifully when the heat of August finally arrived.

An interesting annual, the Nicotiana sylvestris (tobacco) produced the massive leaves, and small, white flowers later in the season at all our locations. The plants ranged in height from 4 to 6'.

VEGETABLE PLANTINGS:

Eight tomato and seven pepper cultivars were planted this year for evaluation at the respective sites. The cultivars were:

'Early Girl' VFF hybrid (I) - 52 days 'Big Beef' VFFNTA hybrid (I) - 73 days, '94 AAS 'Celebrety' VFFNTA hybrid (D) - 70 days 'Sunmaster' VFFA hybrid (D) - 72 days 'Superbush' VFN hybrid (D) - 85 days - good for container growing 'Orange Pixie' VFT hybrid (D) - 52 days - another for container growing 'Sausalito' VFFA Hybrid (D) - 72 days, good for processing, making salsa and picante sauce 'Enchantment' VFFN hybrid (I) - 70 days - egg shaped fruit, resistant to bacterial speck

The above letters following the tomato names stand for resistance or tolerance to the following common tomato problems: V = verticillium wilt; F = fusarium wilt; N = nematodes; T = tobacco mosaic virus; and

A = alternaria.

All cultivars of tomatoes and peppers were obtained from Tomato Growers Supply, Box 2237, Ft. Myers, FL 33902.

Peppers:

Sweet: 'Ariane' 'Golden Marconi' 'Orange sun' Hot: 'Habanero' (hottest!) 'Ancho' 'Anaheim TMR' 'Thai Hot Ornamental' (and edible)

POTATOES:

'New Leaf' potatoes that were treated with Bt were planted in Fargo, Carrington and Dickinson to see if they truly did resist the dreaded Colorado Potato Beetle. They did, and produced a decent crop in all 3 locations.

GRASSES - ORNAMENTAL AND TURF:

The following ornamental grasses were planted for evaluation at the Fargo, Carrington and Dickinson sites:

Big bluestem Sideoats gramma Canada wildrye Purple lovegrass Junegrass Swithgrass Indiangrass Prairie dropseed

From the standpoint of landscape impact, it looks as if the Canada wildrye, switchgrass, big bluestem, and Indiangrass are at the top. All are doing well, and are recommended for a low-water requiring landscape.

Turfgrass plots remained active at the Dickinson station, thanks to the efforts of all concerned. With the 1994 plots, Ram I and Touchdown Kentucky bluegrass rated the highest, followed closely by Jamestown II Chewings fescue. The Rebel II tall fescue and Palmer II perennial rye recovered from a bad winter and ended the season rating quite high, certainly well enough to be considered for planting. The 1993 trial plantings had South Dakota Common coming out on top, followed closely by the Triple A tall fescue blend, and Ariba tall fescue. The Cindy creeping red fescue had two pretty good looking reps. This attractive cultivar would look good in a elite bluegrass mixture, or as a stand alone planting in a shaded area.

Back to 1997 Research Reports Table of Contents Back to Research Reports Back to Dickinson Research Extension Center (http://www.ag.ndsu.nodak.edu/dickinso/) Email: drec@ndsuext.nodak.edu