

Fraser Valley Trials - Summary 2003-2005

November 2005 The orchardgrass, tall fescue and perennial ryegrass varieties over-wintered well and started the 2005 growing season in good condition. Growth conditions were excellent in late winter and grass growth started very nicely. As the season moved into spring the weather was frequently rainy. This became a common theme throughout the growing season and into the late fall, resulting in one less cut than was originally anticipated. Working around the wet weather was challenging but all harvesting and plot maintenance is now complete with four cuts harvested, the last of which occurred November 14. Other challenges in the 2005 season included grasses which had been lodged by the heavy rains and weed control on some sites. The trial data will be analyzed over the next few weeks. Thanks to all of our funding partners for making this work possible.

June 2005 The orchardgrass, perennial ryegrass, and tall fescue varieties over-wintered well, no cultivars exhibiting winterkill. Conditions in late winter were optimal for grass growth, and by the end of February the grass fields were beginning to look lush. The grasses were fertilized in March and April as weather allowed (some producers in the Fraser Valley didn't get the opportunity to fertilize their grass before first cut because of frequent rainy days). The first cut for all varieties was completed during May with the grasses being in advanced stages of maturity. Towards the end of the month, some lodging had occurred as the taller grasses were flattened by heavy rains. The lodging made the harvests somewhat difficult as the grasses had to be coaxed into the harvester. Otherwise, harvests went well. Second harvest is expected in June.

March 2005 Plots in Abbotsford, Agassiz, and Chilliwack were seeded with varieties of tall fescue, orchardgrass, and perennial ryegrass. Most plots produced five harvests. The Fraser Valley experienced unusual growing conditions for forages in 2004. As well as having a cold winter, it had a record hot and dry summer stunting the growth of grasses. Irrigation was used at the Agassiz and Abbotsford locations to maintain the plots. Orchardgrass was able to tolerate the hot and dry weather to a certain degree, but the perennial ryegrass and tall fescue (to a lesser extent) suffered under these conditions, especially when not irrigated.

December 2004 During this past year harvests were conducted on plots in Abbotsford, Agassiz, and Chilliwack. At these sites varieties of tall fescue, orchardgrass, and perennial ryegrass were examined for

their dry matter yield from May 6th to November 4th. Most plots produced five harvests. Data is beginning to be entered into the computer and data analysis should be completed this winter.

The Fraser Valley experienced unusual growing conditions for forages during this past year. As well as having a cold winter, it had a record hot and dry summer stunting the growth of grasses. Irrigation was used at the Agassiz and Abbotsford locations to maintain the plots. The Chilliwack site was not irrigated and only four cuts of perennial ryegrass and tall fescue were obtained. Orchardgrass was able to tolerate the hot and dry weather to a certain degree, but the perennial ryegrass and tall fescue (to a lesser extent) suffered under these conditions, especially when not irrigated. The hot weather appeared to prevent the proliferation of weeds, but did not prevent the invasion of volunteer grasses into the plots. These had to be removed by hand. Italian ryegrass was a considerable problem in the Chilliwack tall fescue and perennial ryegrass plots in the beginning of the year. Orchardgrass was a problem in the Chilliwack tall fescue and perennial ryegrass plots during late summer. Quackgrass was a problem in the Sumas perennial ryegrass plots in the late summer also.

In August, at our Agassiz site it was noted that one variety of tall fescue suffered heavy rust, and another tall fescue variety suffered mild rust. One variety of perennial rye also suffered from rust.

June 2004 In May the first cuttings were harvested from the three sites in Abbotsford, Agassiz, and Chilliwack. Varieties of tall fescue, orchardgrass, and perennial ryegrass were examined for their maturity at harvest and their dry matter yield. Substantial variations for both traits among varieties were noted for all grass species.

In the Chilliwack and Abbotsford sites one variety of orchardgrass did not survive over the winter, and in the Abbotsford site two varieties of perennial ryegrass demonstrated a susceptibility to winter kill. No doubt the extremely cold winter in the Fraser Valley contributed to the winter kill. However, low temperatures are not the only cause of winter kill; wet soils, a high water table, lack of snow cover, and desiccation also contribute to grass injury over winter and these factors may explain why the same extent of winter kill was not observed across all sites.

Early this spring it was observed that some of the tall fescue plots were not satisfactory. These plots had sub-optimal coverage of grass exhibiting patches of bare ground, and weeds and volunteer grasses were beginning to infiltrate the plots. Because of the danger of having

plots that would not be appropriate for obtaining experimental data, we felt the need to reseed the tall fescue. Mike Dykshoorn of Abbotsford and Doug Rutley of Chilliwack kindly allowed us to seed new tall fescue trial plots in their fields. These plots are coming up well, and we anticipate recording data from these plots by the spring of 2005. As the spring progressed, many of the tall fescue plots that we were concerned about recovered well and most of the plots were suitable for harvest. The extra plots at the new sites should more than make up for the plots that were unsuitable.

The second cutting of the coastal trial plots will be completed over the next several weeks.

We wish to express our appreciation to John Hylkema of Chilliwack and Louis Schumann of Abbotsford, for the use of their fields and their assistance with helping to move grass cuttings off the fields.

October 2003 The three Fraser Valley sites contain 17 varieties of orchardgrass, 11 varieties of tall fescue and 10 varieties of perennial ryegrass. The Sumas Site was seeded mid May. It's far more mature than the other two sites due to the earlier planting. The Chilliwack site was seeded the 3rd week of May. It's a non-irrigated site, and even with the extremely dry summer, the stand looks fairly good. The Agassiz site was not seeded until the first week of June. Due to the late seeding and the extremely dry summer, the site was irrigated three times.

June 2003 Grass variety testing is again underway in three geographical regions around British Columbia thanks to the financial support of the Investment Agriculture Foundation of British Columbia, the B.C. Cattle Industry Council and industry seed suppliers.

There are three sites located in the lower Fraser Valley, one each in Abbotsford, Chilliwack and Agassiz. These plots contain 17 varieties of orchardgrass, 11 varieties of tall fescue and 10 varieties of perennial ryegrass.