

[Log Out](#)

Methods for Experiment 244

Above Ground Biomass Sampling

Biomass was collected from a clip strip that is 1m x 10cm. A handheld clipper was used to cut as close to the ground as possible and collect the biomass. Clip strips were sorted to species, dried and weighed. This is done for every plot.

Below Ground Biomass Sampling

A 2 inch diameter root core was used to collect three 30cm deep root cores from each clipped strip after the above ground harvest. The soil is washed away from the roots. The roots are collected, dried and weighed. This is done for every plot.

Ceptometer Sampling

Ceptometer readings are taken once a month in the Percent Cover areas of each plot throughout the growing season. One measurement is taken above canopy and 3 measurements are taken below the canopy. The machine averages the 3 below readings and gives an estimate of LAI.

Cropscan Radiometry Sampling

Cropscan Radiometry readings are taken once a week throughout the growing season above a permanently-established point within each plot.

Percent Cover Sampling

The percent cover area is in the middle of the plot and is 1m x 0.5m. The percent of the ground that is covered by each individual species that is rooted within the percent cover area for every plot is measured. The total for the vegetation and non-vegetation cannot be more than 100%.

Pesticide Applications

There are 5 treatments:

1. Soil drench fungicide
2. Foliar fungicide
3. Insecticide
4. All pesticides
5. Control (no pesticides)

Pesticides are applied once every 2 weeks to the plot throughout the growing season, weather permitting. They are applied by a licensed applicator (Jon Anderson).

Photographs

Photographs are taken from the east edge of every plot. A tripod is used so the picture is from the same location every time.

Plot Description

Plots are 1.5m x 2m and nested in 3 E120 plots and 38 BAC plots (n = 41 total). The plots were established in 2007. There are 5 treatments nested in each larger plot, individual plots run along the east edge of the whole plot. Treatments are numbered from south to north and they are also colored to indicate the treatment.