

2010/2011 Cranberry Mowing Research

Linda White

There have been questions about the practice of mowing young beds in order to increase upright density, bed fill and yield. One of the most common questions is “When should mowing be done?” To determine if mowing has any effect – positive or negative – on young cranberry beds, a small study was begun in 2010.

On a 2-year old Steven cranberry bed in Bandon, Oregon, mowing trial plots were laid out. Plots were 20 ft² in size (4' x5') and were mowed either May 24, 2010, June 23, 2010, or not mowed. The mowing was done using a standard riding lawn mower set at the highest cut height. The cranberry cuttings from each plot were caught and weighed to determine how much vegetative matter was pulled off of the bed from the mowing. Only the fresh weight of the mowing were recorded as the dried plant matter was destroyed due to a fire.

In September 2010 and April 2011, the number of uprights were counted from 1 ft² sections within each plot. Bud set was also determined from the same sections within the plots. Fruit yield was determined by harvesting all of the fruit within a 1 ft² section in late September of 2011.

Results and Conclusions:

The amounts – by weight – of the mowings from each plot were higher in May than in June. However, since only fresh weight was determined, the greater weight of the May mowings may have been due to water weight. Both the May and June mowed plots showed significantly greater number of uprights over the un-mowed plots. May and June mowed plots averaged 104 uprights, while the un-mowed plots averaged 70 uprights (Figure 1). Bud set was not significantly different between treatments, however, the percent of bud set was significantly higher in the un-mowed plots versus the mowed plots, and bud set increased over the winter months (Figure 2). Fruit yield data was collected on September 30, 2011, from each of the treatment plots. Average yield data was highest in the June mown plots and lowest in the May mown plots; however, there were no significant differences between any of the treatments (Fig. 3). 2011 yield was not affected by 2010 mowing.

The 2010 growing season was not typical for the region so it is unclear as to whether this study would be valid given a more normal growing season. The experiment cannot be tested within the same bed, either, since the experiment only considers young, 2-year old beds. If another 2-year old bed becomes available in the region, another year of experimentation would help determine if mowing a young bed would be a valid practice.

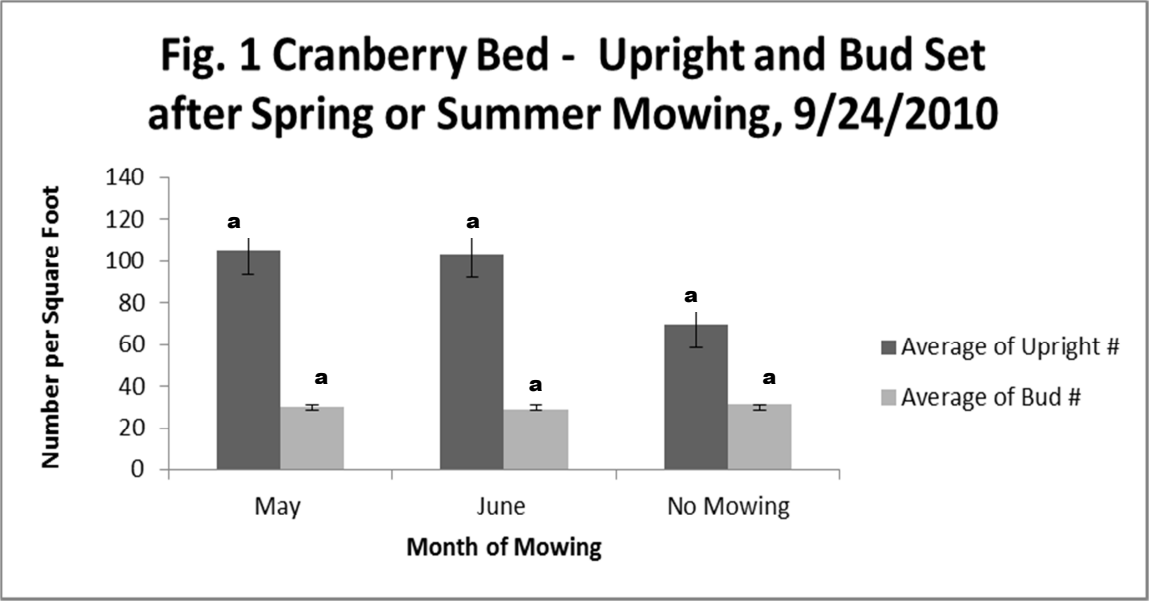


Fig. 1. Number of Uprights and Bud Set on September 24, 2010, after mowing regimes.

*Bars with different letters on the same treatment specify significant differences.

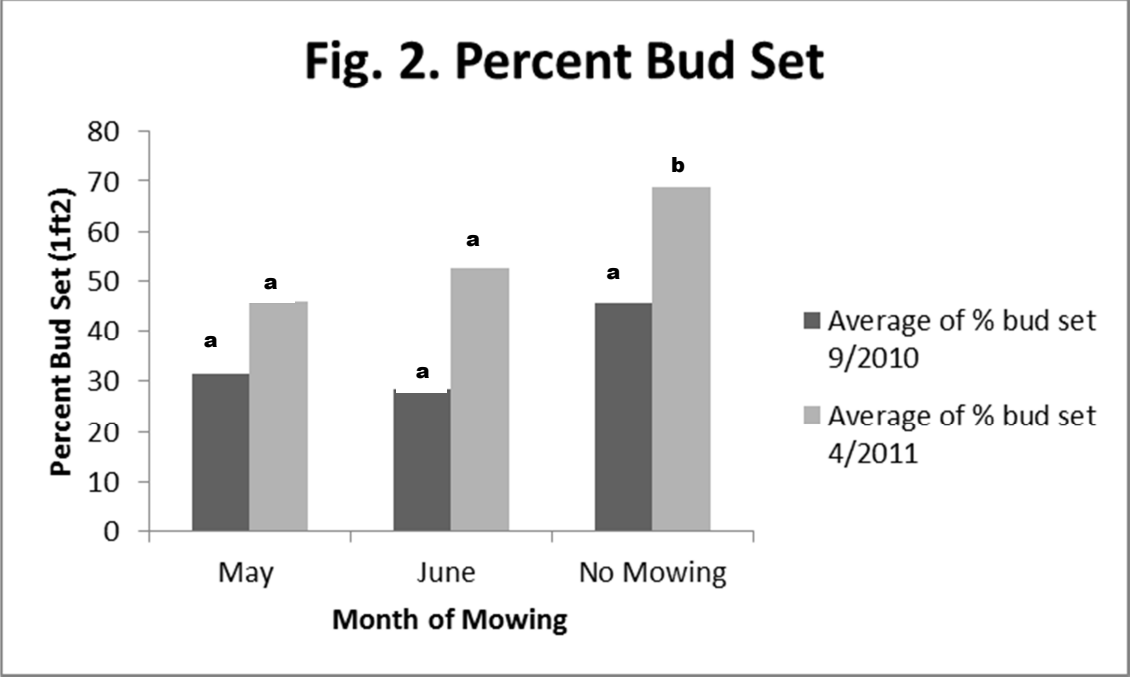


Fig. 2. Percent buds set in September 2010 and April 2011 from a 1 foot square area within different mowing regimes.

*Bars with different letters on the same treatment specify significant differences.

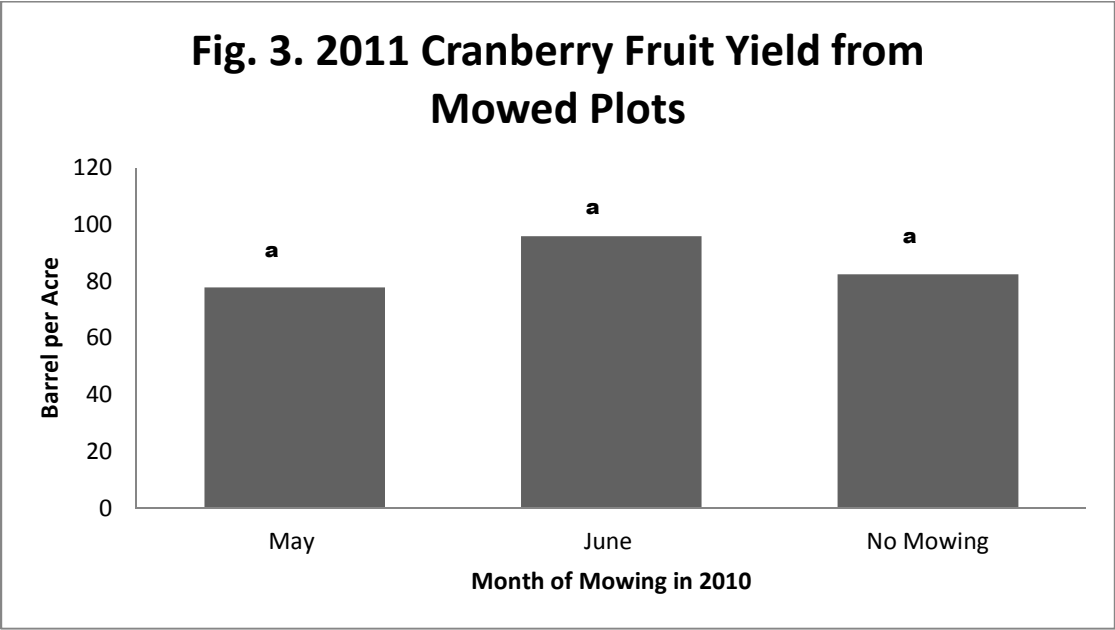


Fig. 3. Yield from September 2011, in barrels per acre, from plots mowed in 2010.

*Bars with different letters on the same treatment specify significant differences.