

Proposal for standard test for wheel traffic

D. Undersander¹, J. Moutray², P. Peterson³, C. Sheaffer³
University of Wisconsin¹, ABI Alfalfa, Inc.², and University of Minnesota³

Plant Culture

Plots to be seeded, arranged and managed according to Forage Yield Testing Guidelines Standard. Sufficient space should be allowed on all sides of traffic plots for driving and turning without affecting no wheel traffic plots. Plots to be seeded in spring with seeding rate 18 lbs per acre, experimentals to be inoculated and may or may not be treated with Apron as experimenter feels appropriate. First cut yield to be taken 60-65 days after spring seeding with subsequent cuts at 30-day intervals. Duplicate trials are seeded, one to receive traffic and the other to receive none beyond that necessary to take yield. It is desirable to impose the least traffic possible with plot harvesting equipment. No cuttings to be taken after early September.

Traffic equipment and method of application

Use tractor weighing approximately 8,000 lbs (90 hp) to provide wheel traffic (record exact weight of tractor). The model is not significant but tractor weight to wheel contact area is. The tractor should have 18.4 inch wide R-series (V-lugs) in back and may have front tires with either lugs or F-series (single rib) on wide front. Tires may be either bias or radial belted and should be inflated to 16 psi (record pressure if different).

The procedure is to drive over plots on the fifth day after every cutting in direction of planting and harvesting, moving over 1 wheel width with each pass so that, when opposite side of plots is reached, plot area has been completely covered with back tractor wheels twice.

Measurements

Traffic tolerance is measured in terms of yield under traffic as a % of yield without traffic.

Check Cultivars

Based on 2 – 3 year studies in Wisconsin and Iowa we suggest Duragreen as the tolerant check and FQ 315 and 54Q53 as the intolerant checks.

Scientists with expertise

Name..... Jim Moutray
Address..... ABI Alfalfa, Inc.
2316 – 259th Street
Ames, IA 50014
Phone..... (515) 292-2432
Email..... moutray@abialfalfa.com

Name..... Dan Undersander
Address..... Dept. of Agronomy
1575 Linden Drive Univ. of Wisconsin.
Madison, WI 53706
Phone..... (608) 265-3437
Email..... djunders@facstaff.wis.edu

References

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