



The effect of strain and cultural treatment upon the seed production of birdsfoot trefoil, and a preliminary study of pod shatter-proofing
by Howard Rhoads

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Abstract:

Ten strains of birdsfoot trefoil were evaluated for seed and forage yielding ability when cut for seed. No significant difference existed. Differential ability to withstand late spring freezes was observed between strains and susceptibility ratings assigned.

The effect of several cultural treatments upon seed yields and forage yields when cut for seed was studied using Empire strain. Width of row and rate of seeding did not affect seed yields; significantly better yields were obtained where 2,4,D was employed to control weeds.

In this test, row spacing did not affect forage yield; best forage yields were obtained where the seeding rate was 6 lbs. per acre. Hay yields were superior, where 2,4,D was applied, over yields where early mowing was used to control weeds.

The extreme variability of rate of maturation of pods was substantiated. A relationship between length of pods and percentage shattering was apparently lacking; color of pods and shattering percentage was significantly correlated. The relationship between age of pods, percentage shattering, color of pods, weight of seeds, and germination percentages of seeds of different ages was studied.

A preliminary evaluation of the possibilities for shatterproofing by chemical methods was made. Para-chlorophenoxyacetic acid was apparently effective and the reaction was quite stable for all concentrations used and on all dates of harvest. Some concentrations of 2,4,D, methylcellulose gum, naphthaleneacetic acid, and p-chloro-phenoxyacetic acid appear to be more effective than other concentrations. Certain concentrations of 2,4,5,T, and 2,4,D may result in increased shattering. Interaction evaluations indicate that certain chemicals react differently on different dates of harvest following spraying and that some concentrations of various chemicals react differently on different harvest dates.

THE EFFECT OF STRAIN AND CULTURAL TREATMENT
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TREFOIL, AND A PRELIMINARY STUDY
OF POD SHATTER-PROOFING

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PARSONS BOND
100% COTTON FIBER

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