

Station Grass and Mixture Trial

Tables 8, 9, and 10 summarize the yields of the mixtures and grasses in the new Station trial seeded in the spring of 1958. This trial is similar to that being carried on at the other branch stations and at the main station in Fargo. Yields continued generally high in these plots, and probably the favorable moisture conditions at the time of seeding are still influencing yields in this trial.

Table 8 gives the 1960 yields from the grass-alfalfa mixtures, and Table 9 summarizes the 2-year average production from the mixtures included in these trials. As shown in Table 8, alfalfa only contributed about one-sixth of the average yield of all mixtures. Actually alfalfa was of major importance as a contributor to yield only in one mixture, that of Lincoln brome and Ladak alfalfa. Here alfalfa produced 1147 pounds out of a total per acre yield of 3,272 pounds. For the most part, alfalfa produced from less than one-fifth of the yield to less than one-fortieth in the mixtures.

Table 9 shows that the intermediate wheatgrass-alfalfa mixtures have produced slightly better on the basis of the 2-year averages than the other mixtures. The average production of these mixtures has been a little over 1 $\frac{21}{31}$ tons per acre. The Russian wildrye-alfalfa mixtures have been somewhat lower producing than the other mixtures, as it would be expected from the growth habit of Russian wildrye. All mixtures together show an unusually good 2-year average production of over 2 $\frac{1}{4}$ tons.

Table 8. 1960 Hay Yields from Station Grass-Alfalfa Mixture Trial seeded in 1958.				
Dry-weight-Lbs./Acre				
Mixtures	Grass	Alfalfa	Weeds	Total Plot Yield-Lbs., Acre

Nordan Crested-Teton Alfalfa	2964	432	---	3396
Intermediate Wheatgrass-Teton Alfalfa	3306	75	---	3381
Lincoln Brome-Ladak Alfalfa	2095	1147	30	3272
Intermediate Wheatgrass-Ladak Alfalfa	3041	153	60	3254
Lincoln Brome, Nordan Crest, Ladak Alfalfa	2831	373	---	3204
Lincoln Brome-Teton Alfalfa	2136	626	3	2765
Manchar Brome-Ladak Alfalfa	2548	216	---	2764
Russian Wildrye 2355-Teton Alfalfa	1822	485	---	2307
Russian Wildrye 2355-Ladak Alfalfa	1393	312	11	1716
Average	2460	424	11	2895

Table 9. Two-year hay yields from Station Grass-Alfalfa Mixture Trial seeded in 1958.			
Dry weight-Lbs./acre			
Mixtures	1959	1960	Total Plot Yield Lbs./acre
Intermediate Whtgr.-Teton Alfalfa	3144	3281	3262
Intermediate Whtgr.-Ladak Alfalfa	2818	3254	3034
Nordan Crested-Teton Alfalfa	2536	3396	2966
Lincoln Brome, Nordan Crested, Ladak Alf.	2447	3204	2825
Lincoln Brome-Ladak Alfalfa	2171	3272	2721

Lincoln Brome-Teton Alfalfa	2329	2765	2547
Manchar Brome-Ladak Alfalfa	2127	2764	2445
Russian Wildrye 2355-Teton Alfalfa	1449	2307	1878
Russian Wildrye 2355-Ladak Alfalfa	1653	1716	1684
Average	2297	2895	2596

The production of the straight grass seedings in the Station Trial is given in Table 10. It is apparent that the 2-year average yields of the straight grass seedings are very nearly as good as the yields of the grass-alfalfa mixtures. The 2-year average yield for all grass varieties is 2,587 pounds per acre (dry-weight) and 2,597 pounds per acre for all mixtures. It is apparent that as yet the presence of alfalfa in mixture with grasses has not contributed substantially to increased yields in this trial. The grass yields are unusually good in this trial.

Intermediate wheatgrass has been the top producer in the trial so far, with an average 2-year production of 3,152 pounds per acre. Summit crested, Lincoln brome, Southland brome, and nordan crested follow quite closely. Northern brome and Manchar brome appear to have somewhat lower average yields than the previously mentioned varieties, and slender wheatgrass and Russian wildrye are distinctly lower in average hay production than the other varieties.

[Back to 1960 Research Reports Table of Contents](#)

[Back to Research Reports](#)

[Back to Dickinson Research Extension Center \(http://www.ag.ndsu.nodak.edu/dickinso/\)](http://www.ag.ndsu.nodak.edu/dickinso/)

[Email: drec@ndsuent.nodak.edu](mailto:drec@ndsuent.nodak.edu)
