DIFFERENCES BETWEEN BARNYARD GRASSES AND JAPANESE MILLET

E. N. BRESSMAN and E. S. FRY

The difficulty in distinguishing barnyard grass (Echinochloa crus-galli Beauv.), commonly called water grass in the West, from the true Japanese millet (E. frumentacea Link), except at the time of maturity of the plants, has led to the substitution of barnyard grass seed for Japanese millet. The names barnyard grass and water grass are used interchangeably in this paper. It is well known that Japanese millet is more productive than the barnyard grasses. Experiences in Oregon in 1928 indicate that care is necessary in obtaining true Japanese millet seed.

Hale states that all of the seed sold to growers in Coos County, Oregon, in 1928, for Japanese millet was not millet but water grass. Yields from this seed were less than half of what was obtained from millet in 1927. Some fields of millet produced as much as 30 tons an acre. He says, "The actual loss in Coos County is hard to estimate as most of the dairymen were depending on the millet for green feed and found themselves without enough green feed to do any good. The biggest damage was done in turning the farmers against the planting of any more Japanese barnyard millet. This crop has just reached the promotion stage in Coos County and it was necessary this year to revert to the demonstration stage again and start things all over."

In response to a request for Japanese millet seed, a California seed house replies in part, "We are enclosing herewith small sample of the type of Japanese millet which is being used in this district. It is known botanically as Echinochloa crus-galli. We presume this is the type you wish."

Pine states, "The first millet in Tillamook County, Oregon, was planted in 1925, approximately four acres. In the year 1926 there was a considerable increase in the plantings, and in the year of 1927 it was estimated that 200 acres were seeded to Japanese millet. In the year 1928, there was an increase of approximately 100 acres, making a total of 300 acres. This was the year that barnyard grass was substituted for Japanese millet. The results were so discouraging and so widely distributed over the entire county and regardless of the amount of publicity we used to inform them of this disaster, it

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2Associate Professor and Student, respectively.

3Correspondence of July 11, 1929.

4Correspondence of July 16, 1929.