A USEFUL PLANT MARKING TAG

The common paper marking tag with a loop of string has been used in the past at the Mississippi Agricultural Experiment Station, to identify the parents of controlled crosses and in segregations and has been found to have some disadvantages. This kind of tag sometimes has loosened down the culm or been blown over and off, labeled, in either case often allowing the tissue to blow away. Attaching the paper tags is also time consuming and awkward. Writing sometimes has been partially rubbed off by abrasion against nearby vegetation, when the tags have fluttered in the wind.

Tubular glassine or waxed paper bags were given to David J. Ward, ARS, USDA, Beltsville, Maryland, to cover the emasculated heads. This material could be held around the base of a spike with a paper clip attached to the paper tags. Paper clips were therefore used to secure the base of the enclosure to the culm or spike. The paper clip, however, sometimes weakened the culm, causing it to break and was also an extra operation.

In the spring of 1958 a laundry "daily delivery" tag was adopted with success. The tag consists of red or orange cloth. As shown in figure 1, the tag is attached at one end with a wire spring clasp to the pressure. It can be quickly attached to the end of the glassine tube and will hold the tube in place. The cloth is easy to write on and can accommodate all the necessary figures. The tag does not whip in the wind and is easier to write on. The "daily delivery" tag can be more quickly and conveniently used than the former tagging system, when using the paper clip used previously.

The data for pounds per acre of hay and of the various chemical constituents in the hay are presented in table 2. The insects reduced the hay yields of Vernal 21% and of Narragansett 28% with high soil fertility, and 36% and 48%, respectively, with low fertility. There was only an 11% difference in hay yields with both varieties due to soil fertility alone. The lack of a marked response in the hay yields to soil fertility alone was due largely to the fact that the subsoil apparently contained a good supply of P and K. As a result, difference in hay yields from soil fertility alone did not begin to appear until the second harvest year of the experimental trial, the year the forage samples for the present study were obtained.

The pounds per acre produced of each of the chemical constituents analyzed in the hay of each variety were reduced also by the leafhopper infestation at each soil fertility level. As with the hay yields, these reductions were greater with low soil fertility than with high fertility. It is noteworthy that the reductions in the yields of protein, ash, Ca, and P, constituents important in animal nutrition, were in general greater than comparable reductions in hay yields. The average reduction for these four constituents amounted to 33% with Vernal and 38% with Narragansett under high soil fertility, and 41% and 55%, respectively, under low soil fertility. —DALE SMITH and J. T. MEDLER, Pro-