SOME METHODS OF RECORDING DATA IN TIMOTHY BREEDING.¹

MORGAN W. EVANS²

Certain methods of obtaining records, which have been used during the past few years in connection with timothy breeding experiments, are described in this paper to illustrate the advantage of substituting quantitative data for those which are merely the results of general observations. For several years past the writer has been engaged in timothy breeding investigations, at the Timothy Breeding Station which is conducted cooperatively by the United States Department of Agriculture and the Ohio Agricultural Experiment Station, at Elyria, Ohio. The breeding of timothy is a phase of experimental agronomy which is of very recent development. Many of the methods which are used in timothy breeding, consequently, have to be originated as the work progresses.

METHOD OF COMPARING DIFFERENT VARIETIES OF TIMOTHY.

One of the important phases of work in the breeding of timothy, as well as of any other crop, is the comparison of different selections or varieties with one another. In the comparison of different varieties of timothy, one of the things to be determined is the relative yields of hay which they will produce. As the result of a number of studies by different investigators, working with various field crops during the past ten or fifteen years, quite reliable methods have already been developed for growing the varieties in experimental test plats, and for obtaining records of the hay yields in these plats. But such matters as the time of blooming, maturity, number of green leaves on plants, and length of stems, however, are likely to be recorded differently by different observers, unless definite methods are adopted.

² Assistant Agronomist, Bureau of Plant Industry.