INVESTIGATIONS of pasture yields and consumption under actual grazing conditions have been carried on for a number of years at the Illinois Experiment Station. Although a vast amount of experimental research in pastures and pasture plants has been and is being performed at the various experiment stations in this and foreign countries, it is usually conceded that specific results are broadly localized depending upon a number of ecological factors. This means that within the confines of a rather restricted area the farmers feel that they must depend upon the experimental results of their own local and state experiment stations.

Practical information relative to pastures, pasture plants, and utilization is demanded by farmers in ever-increasing number. The motivating forces behind this demand, economic or otherwise, have brought forward the very pertinent fact that the agricultural industry as a whole is vitally interested in pastures and pasture improvement. The hackneyed phrase that "The most economical source of nutrients is good pasture," is true for most types of livestock, and the proper utilization of pasturage is important to the success of any livestock enterprise. The demand for information previously mentioned has forced the investigation of many problems, some old and some new.

The practical evaluation of pastures presents a problem in itself of large proportions. There are many methods in use, but no single one has found general use in this country. Lack of uniformity in methods can be ascribed to the wide range of variable ecological and topographical conditions necessitating modifications and changes in technic. The most popular method in use for measuring yields is that of clipping to simulate grazing. Like all methods it is, of course, open to criticism for obvious reasons, but at the present time there apparently is no better method except the measurement of pastures by the use of grazing animals or combinations of clipping and grazing.

The method used in evaluating pasture yields and consumption at Illinois is a modification of that recommended by the Pasture Committee of the American Society of Agronomy. The latter method does not presume to measure consumption directly but rather bases its measure of consumption upon gains in live weights and in animal products. The method as used at this station measures yields by clipping of sample areas as well as by the differences between growth and consumption. The total growth, total consumption, and the residual growth are obtained at the same time. This method is open to criticism particularly from the standpoint of the necessity of

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