A STUDY OF THE RELATION OF SOME MORPHOLOGICAL CHARACTERS TO LODGING IN CEREALS.¹

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INTRODUCTION.

One of the perplexing problems which confronts the cereal plant breeder is the production of nonlodging small grains which at the same time possess high yielding capacity. In 1916, a project was organized at the Minnesota Agricultural Experiment Station with the object of determining whether some simple morphological character is closely correlated with lodging or nonlodging.² With such a criterion the matter of studying lodging would be much facilitated, since the nonlodging forms could be immediately isolated without waiting three or more years to determine the promising selections or parental stock. A few investigations bearing on this subject have been made.

REVIEW OF LITERATURE.

Moldenhawer,³ working with wheat and barley, found number of vascular bundles to be a distinguishing characteristic for different sorts and that nonlodging sorts could be selected by means of the

¹ Published with the approval of the Director as Paper No. 171 of the Journal series of the Minnesota Agricultural Experiment Station, University Farm, St. Paul, Minn. Received for publication April 8, 1919.
² The writers are indebted to H. K. Hayes, head of the section of plant breeding, Division of Agronomy and Farm Management, for assistance in outlining and carry out this project.