

ELYMUS VIRGINICUS, L.—VAR. *GLAUCUS*.

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IN August, 1888, I found three or four plants of *Elymus Virginicus*, L., within ten feet of each other that were glaucous. These were among the usual non-glaucous plants, and grew on rich river bottoms. I saved seeds of both forms and planted patches about ten by sixteen feet. On August 24th, 1889, I examined both plots with the following results: There were nearly four hundred plants in each plot. Those from seeds of non-glaucous plants were none of them glaucous, while those from seeds of the glaucous plants were all glaucous except two plants. I exhibit here dried plants of the glaucous and non-glaucous seedlings, and specimens of the glaucous plants found in 1888.

The practical bearing of this experiment is not far to see. It shows how promptly a peculiarity may often be transmitted by the seedings of the first generation.

THE GRASS PROBLEM IN NEBRASKA.

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[*Abstract.*]

UPON the plains westward of the Missouri river, the question as to the proper grasses and other plants for forage, is one of great importance. The first settlers nearly all assumed that the ordinary forage plants of the older States would not flourish upon the plains. Many hastily concluded that the wild grasses would have to be the sole dependence of the farmer for all time. However, a careful study of the problem shows us that we must change our opinions about both the cultivated and the wild grasses, and other forage plants.

Nebraska is a great inclined plane. Along its eastern border its altitude above sea level is about one thousand feet. A hundred miles or so to the west the elevation is two thousand feet, at another hundred it is three thousand feet, at still another it is four thousand, while along the western border it reaches full five thousand feet in many places. On the lower lands the rainfall is from 30 to 33 inches per year, while on the higher lands it is probably about 20 inches. The soil, while varying somewhat, is pretty generally well supplied with those constituents which enable it to support a good growth of vegetation. The surface is everywhere undulating, and often abrupt and precipitous. Along the streams there is usually a belt of compara-