

1924

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Recommended Citation

Lindstrom, E. W. and Gerhardt, F. (1924) "Inheritance of Carbohydrates and Fat in Corn," *Proceedings of the Iowa Academy of Science*, 31(1), 133-133.

Available at: <https://scholarworks.uni.edu/pias/vol31/iss1/28>

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INHERITANCE OF CARBOHYDRATES AND FAT IN
CORN

E. W. LINDSTROM AND F. GERHARDT

Chemical analyses of cross-bred ears, involving the yellow dent (Iodent) and white Evergreen sweet corn varieties, have yielded some interesting results with respect to the detailed mode of inheritance of sugars, dextrans, starches, and fat. High sugar and dextrin (also low starch) are distinctly recessive in inheritance, although there is a small cumulative effect of the genetic factors represented in the endosperm development with its 3x condition. No such cumulative effect is present with respect to fat, the hybrids (made reciprocally) having identical values, intermediate in percentage, but with a slight tendency towards a dominance of low fat. Carbohydrate and fat values are inter-related genetically, but very likely this indicates a morphological relation within the kernel.

ECOLOGICAL NOTES IN THE ARAPAHOE, MOUN-
TAINS NEAR FRASER, COLORADO

L. H. PAMMEL

The region considered is on the west side of the Rocky Mountain range in the vicinity of Fraser in the Arapahoe Mountains, Colorado—the Arapahoe National Forest. On many of the tributaries of the Fraser river are little lakes of rather recent origin caused by the building of dams by the beaver. At one time the beaver were numerous, it is only in recent years that they have returned. On the borders of these lakes are several species of *Carex*, much *Phleum alpinum*, *Calamagrostis*, *Salix irrorata*. The new beaver dams have caused the destruction of the lodge pole pine in the old swamp. The Englemann spruce apparently can stand submergence longer than the pine. The flood plain of the Fraser river is flanked on each side by a mesa which here and there produces scattered groves of lodge pole pine, but the dominating plant is the Sage brush (*Artemisia tridentata*, and such types as *Stipa*, *Bouteloua oligostachya*, *Agropyron Smithii*, *A. dasystachyum*, *Orthocarpus*, etc.) A most marked feature is the zonal distribution of plants on the slope and the more or less level ground, *Bouteloua*, *Agropyron* and *Artemisia* occupying different zones.