THE INHERITANCE OF GRAIN COLOR IN WHEAT

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INTRODUCTION

The discovery by Nilsson-Ehle (4), that grain color in wheat is dependent in some cases on cumulative factors, furnished a foundation for the present view that the inheritance of size characters can be explained in the same way as the inheritance of qualitative characters. The studies of Nilsson-Ehle, the Howards (3) in India, and Gaines (1) in this country have demonstrated the following breeding facts: 1. F2 segregations of red-grained and white-grained plants in crosses between red-grained and white-grained wheats approximate the ratios of 3:1, 15:1 or 63:1 according to the number of factors for grain color contained in the red-grained parent. 2. White-grained segregates are obtained in some crosses between red-grained parental varieties.

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3Reference by number is to "Literature Cited," page 789.