THE INHERITANCE OF RESISTANCE TO BUNT OR STINKING SMUT OF WHEAT.¹

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The material presented in this paper concerns the bunt resistance of three wheats, Turkey (Washington No. 326), Hybrid 128 (Washington No. 592), and Florence (Washington No. 634), and the resistance of the F₂ and F₃ as well as selections in the F₄ generation of two crosses, Turkey × Hybrid 128 and Turkey × Florence.

The wheats under investigation at the Washington Agricultural Experiment Station show great variation in susceptibility to bunt (Tilletia tritici). The comparative resistance of thirteen different varieties under conditions of maximum infection is described in an earlier article.²

DESCRIPTION OF PARENTS.

According to the previous report, Turkey (T. sativum vulgare) produced 1.81 percent of bunt, whereas Hybrid 128 (T. sativum compactum) with similar conditions of infection produced 92.15 percent. These two varieties are of considerable importance in Washington, about 2,000,000 bushels of Hybrid 128 and 1,000,000 bushels of Tur-

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