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1. Blotching gene on short arm of chromosome 4.

Earlier tests (MNL 31:60) have shown that one of the three genes involved in the blotching system, which causes blotches of color to appear in the aleurone layer when the genotype for the principal color factors is AA cc RR, is located on chromosome 4. Three-point backcross tests completed during the past season show that the Bh gene is located on the short arm of this chromosome, 42 cross-over units from Su and 50 units from Gl₃. This is one of the few genes so far located in this general region. The data are shown below:

Table 1
Three-point Tests of Linkages of Bh, Su, and Gl₃ on Chromosome 4.

| Genotypes XY | Linkage Phase | Number of Individuals | | | | | Recombinations | |
|--------------------|------------------|-----------------------|-----|-----|-----|-------|----------------|---------|
| | | XY | Xy | xY | xy | Total | Number | Percent |
| Su Bh | RB | 439 | 593 | 631 | 454 | 2117 | 893 | 42.2 |
| Su Gl ₃ | CB | 180 | 149 | 138 | 200 | 667 | 287 | 43.0 |
| Su Gl ₃ | RB | 248 | 382 | 338 | 234 | 1202 | 482 | 40.1 |
| Total ³ | | | | | | 1869 | 769 | 41.1 |
| Bh Gl ₃ | CB | 287 | 303 | 299 | 313 | 1202 | 602 | 50.1 |
| Bh Gl ₃ | RB | 159 | 171 | 159 | 178 | 667 | 337 | 50.5 |
| Total ³ | | | | | | 1869 | 939 | 50.2 |

P. C. Mangelsdorf

2. Races of maize in Argentina.

This work has been started with a collection of maize ears from the highlands of Northwestern Argentina.

On the basis of the external morphology of the ear, a preliminary classification of the entire collection was made and it was possible to choose typical ears to represent the different races. The internal characters of the ear and kernels are being studied and the preliminary classification may have to be altered in some cases. Roughly there seem to be about 20 different races of indigenous corn in Northwestern Argentina. Almost half of them are related to races of Peru such as Confite Puntiaquido, Kculli, Confite Puneño, Chullpi, Uchuquilla, and most of the races show close relationship with Bolivian races.