An obvious possibility is that the multifactorial system is enabling or forcing r to become functional in some cells. We cannot, however, dismiss the possibility that the system acts to bypass the r locus, and the production of color has nothing to do with r.

Oliver E. Nelson, Jr.

3. A gene for iron chlorosis.

In the progeny of coop ear 54-613-1 (Oh 51A X "$sh_3$" pr selfed), four out of eleven plants were pale yellow striped and grew to approximately half the height of the normal sibs. One such plant was selfed and bred true in 1956. A complete nutrient solution including minor elements failed to bring about development of full green color in the greenhouse. Minor elements Ca, Mg, Fe, Mn, Cu, Zn, in combination with sulfate, phosphate, nitrate, and borate ions were added separately in excess. Not all possible combinations were tried. The Fe $SO_4$ treatment resulted in development of full green color whereas no other treatment was effective in overcoming the chlorosis.

J. M. Shively
H. H. Kramer

4. Interaction of endosperm genes.

Several new combinations of ha with $su_2$, du, and wx were synthesized and identified during the past year and showed some rather unusual interactions both with respect to the percent amylose in the starch and with respect to the temperature at which starch grains lose birefringence under polarized light. Data are given on page 120.

It appears that $su_2$ alone and with du and wx will reduce birefrengence end point temperature to about 55° C. Alone and in combination with su and $su_2$, ha raises the end point. Further the same genes, i.e. du and wx, which are lowered by $su_2$, also lower ha. The gene su which raises $su_2$ is also raised by ha.

With respect to amylose content, no combination with ha resulted in higher amylose than ha; $su_2$ combination with ha gave an unusually low value. The intermediate value of ha wx is of interest.