

zymes I, IIa and IIb were prepared from rabbits as previously described [8].

*Immunological comparison of starch branching enzymes.* Starch branching enzymes and branching enzymes were compared in all possible combinations. Ouchterlony double diffusion plates and the neutralization of branching enzyme activity by increasing amounts of antiserum were performed as described previously [8].

*Properties of endosperm starches.* Endosperm starch granules were isolated as previously described [15]. Starch granule morphology and size distribution was determined by light microscopy. Starch was dispersed in 90% DMSO and starch fractions isolated by gel filtration [16].

#### REFERENCES

1. Ozbun, J. L., Hawker, J. S. and Preiss, J. (1971) *Plant Physiol.* **48**, 765.
2. Hawker, J. S., Ozbun, J. L., Ozaki, H., Greenberg, E. and Preiss, J. (1974) *Arch. Biochem. Biophys.* **60**, 530.
3. Pisigan, R. H. and Del Rosario, E. J. (1976) *Phytochemistry* **15**, 71.
4. Hawker, J. S., Ozbun, J. L. and Preiss, J. (1972) *Phytochemistry* **11**, 1287.
5. Boyer, C. D. and Preiss, J. (1978) *Carbohydr. Res.* **61**, 321.
6. Matters, G. L. and Boyer, C. D. (1981) *Phytochemistry* **20**, 1805.
7. Hedman, K. D. and Boyer, C. D. (1982) *Biochem. Genet.* **20**, 483.
8. Fisher, M. B. and Boyer, C. D. (1983) *Plant Physiol.* **72**, 813.
9. Cortman, R. S. and G. R. Reeck (1982) *Biochim. Biophys. Acta* **715**, 170.
10. Greenhouse, V. Y., Xolocotzin, E., De Cuadra, C. R. and Larralde, C. (1982) *Econ. Bot.* **36**, 113.
11. Smith, J. S. C. and Lester, R. N. (1980) *Econ. Bot.* **34**, 201.
12. Doebly, J. and Iltis, H. (1980) *Am. J. Botany* **67**, 982.
13. Iltis, J. and Doebly, H. (1980) *Am. J. Botany* **67**, 994.
14. Boyer, C. D. and Preiss, J. (1981) *Plant Physiol.* **67**, 1141.
15. Boyer, C. D., Shannon, J. C., Garwood, D. L. and Creech, R. G. (1976) *Cereal Chem.* **53**, 327.
16. Boyer, C. D., Garwood, D. L. and Shannon, J. C. (1976) *Starke* **28**, 405.