



**Fig. 2.** Photomicrograph of a longitudinal section through a blade tip from a *C. prolifera* plant held in normal position prior to fixation. This section was illuminated with cross-polarized light and shows numerous amyloplasts randomly distributed throughout the blade tip. The blade was 0.3 cm long at the time of fixation.  $\times 650$ ; (bar = 20  $\mu\text{m}$ ). Gravity was acting along the long axis of the blade (from the top of the figure to its base)

(Sievers and Schröter 1971). Our results support the view that *C. prolifera*, in contrast to *Chara*, uses the same organelles for gravity perception as do higher plants.

This work was supported by National Aeronautics and Space Administration (NASA) grant NSG-7280 to W.P. Jacobs and NASA Fellowship NAGW-70 to M.B. Matilsky.

## References

- Audus, L.J. (1979) Plant geosensors. *J. Exp. Bot.* **30**, 1051–1073
- Berlyn, G.P., Miksche, J.P. (1976) Botanical microtechnique and cytochemistry. Iowa State University Press, Ames
- Buggeln, R.G. (1981) Morphogenesis and growth regulators. In: *The biology of seaweeds*, pp. 627–660, Lobban, C.S., Wynne, M.J., eds. University of California Press, Berkeley Los Angeles
- Chen, J.C.W., Jacobs, W.P. (1966) Quantitative study of development of the giant coenocyte, *Caulerpa prolifera*. *Am. J. Bot.* **53**, 413–423
- Dawes, C.J., Barilotti, D.C. (1969) Cytoplasmic organization and rhythmic streaming in growing blades of *Caulerpa prolifera*. *Am. J. Bot.* **56**, 8–15
- Dawes, C.J., Rhamstine, E.L. (1967) An ultrastructural study of the giant green algal coenocyte, *Caulerpa prolifera*. *J. Phycol.* **3**, 117–126
- Haberlandt, G. (1906) Über den Geotropismus von *Caulerpa prolifera*. *Sitzungsber. Akad. Wiss. Wien Math.-Naturwiss. Kl.* **115**, 577–598
- Jacobs, W.P., Olson, J. (1980) Developmental changes in the algal coenocyte *Caulerpa prolifera* (Siphonales) after inversion with respect to gravity. *Am. J. Bot.* **67**, 141–146
- Juniper, B.E. (1976) Geotropism. *Annu. Rev. Plant Physiol.* **27**, 385–406
- Matilsky, M.B. (1982) Redistribution of amyloplasts in inverted *Caulerpa prolifera* rhizome tips. (Abstr.) *Physiologist* **25**, 233
- Nägeli, C. (1844) *Caulerpa prolifera* Ag. *Z. Wiss. Bot. von Schleiden und Nägeli* **1**, 134–167
- Sabnis, D.D. (1969) Observations on the ultrastructure of the coenocytic marine alga *Caulerpa prolifera*, with particular reference to some unusual cytoplasmic components. *Phycologia* **7**, 24–42
- Schröter, K., Läuchli, A., Sievers, A. (1975) Mikroanalytische Identifikation von Bariumsulfat-Kristallen in den Statolithen der Rhizoide von *Chara fragilis*. *Desv. Planta* **122**, 213–225
- Sievers, A., Schröter, K. (1971) Versuch einer Kausalanalyse der geotropischen Reaktionskette im *Chara*-Rhizoid. *Planta* **96**, 339–353
- Sievers, A., Volkmann, D. (1977) Ultrastructure of gravity-perceiving cells in plant roots. *Proc. R. Soc. London Ser. B* **199**, 525–536
- Zimmermann, W. (1929) Experimente zur Polarität von *Caulerpa* und zum allgemeinen Polaritätsproblem. *Roux Arch. Entw. Mech. Organ.* **116**, 669–688

Received 25 October 1982; accepted 3 May 1983

## Erratum

*Planta* (1983) **158**, 264–271, paper by H.A. Norman, M. Black and J.M. Chapman: The induction of sensitivity to gibberellin in aleurone tissue of developing wheat grains. III. Sensitisation of isolated protoplasts

Figure 7, the abscissa should read:

$\text{GA}_3 - \text{mol dm}^{-3}$