



**Figure 2 a-f.** Diagrammatic representation of spikelets of *Ochlandra* (a, b) and *Bambusa* (c-f) showing the angle of opening. a, *Ochlandra* sp. beginning of female stage; b, peeping-out stage of anthers; c, spikelet of *Bambusa* sp.; d-f, floret opening in *Bambusa*. d, *B. bambos*; e, *Bambusa* sp. and f, *B. vulgaris*.

both taxa having dichogamous flowers, confirm this view. However in *Bambusa* spp, where the two sexes mature simultaneously, the above observation is not acceptable. Being homogamous, these taxa may have a high rate of self-pollination<sup>2</sup>, as inferred in the case of *B. bambos* (= *B. arundinacea*)<sup>21</sup> or perhaps, *Bambusa* spp represent an intermediate condition among woody bamboos where wind pollination and insect pollination co-exist.

The present study is in agreement with the division of the bamboos into two groups<sup>22</sup>: (1) the species in which the androecium and gynoecium mature at the same time, i.e. *Bambusa*-type, and (2) the protogynous species in which the gynoecium matures prior to the androecium, i.e. *Dendrocalamus*-type. We propose a further grouping based on floret opening in the *Bambusa* type, i.e. (1) species in which floral glumes are widely separated (e.g. *B. bambos*, *Bambusa* sp.), and (2) those in which floral glumes are not widely separated as in *B. vulgaris*. We also propose to refer to these as *open florets* in the former and *tubular (closed) florets* in the latter case.

The present study poses a few interesting questions also. Why is it that the bees do not visit the stigmas? Is there any chemical or physical deterrent which prevents these bees from such visits? Further studies are required in these directions and also to confirm the role of bees in

bamboo pollination and the suspected co-existence of self-pollination, anemophily and hymenopterophily in taxa such as *Bambusa*.

- Soderstrom, T. R. and Calderon, C. E., *Biotropica*, 1971, **3**, 1-16.
- Linder, H. P., in *Reproductive Biology* (eds Owens, S. J. and Rudall, P. J.), Royal Botanic Garden, Kew, 1998, pp. 123-135.
- Knuth, P. E. O. W., *Handbook of Flower Pollination* (translation by Davis, A.), Oxford University Press, Oxford, 1906-1909, 3 vols.
- Bogdan, A. V., *Proc. Linn. Soc. London*, 1962, **173**, 57-173.
- Clifford, H. T., *J. Entomol. Soc. Queensland*, 1964, **3**, 74.
- Faegri, K. and Van der Pijl, L., *Principles of Pollination Ecology*, Pergamon Press, Toronto, 1966.
- Bodekar, F. W. T., *Indian For.*, 1930, **56**, 404-405.
- Jackson, J. K., *Nat. Hist. Bull. Siam Soc.*, 1981, **29**, 163-166.
- John, C. K. and Nadgauda, R. S., *Curr. Sci.*, 1997, **73**, 641-643.
- Wong, K. M., *Malay. For.*, 1981, **44**, 453-463.
- Wong, K. M., Malayan Forest Records No. 41, Forest Research Institute Malaysia, Kuala Lumpur, 1995, p. 37.
- Wong, K. M., The Morphology, Anatomy, Biology and Classification of Peninsular Malaysian Bamboos, Botanical Monographs No. 1, University of Malaya, Kuala Lumpur, 1995, pp. 39-40.
- Venkatesh, C. S., *Biotropica*, 1984, **16**, 309-312.
- Nadgauda, R. S., John, C. K. and Mascarenhas, A. F., *Tree Physiol.*, 1993, **13**, 401-408.
- Koshy, K. C. and Harikumar, D., *Curr. Sci.*, 2000, **79**, 1650-1652.
- Ohrnberger, D., *The Bamboos of the World: Annotated Nomenclature and Literature of the Species and the Higher and Lower Taxa*, Elsevier Science B. V., Amsterdam, 1999.
- Koshy, K. C., in Proc. Symp. Rare Endangered and Endemic Plants of the Western Ghats (ed. Karunakaran, C. K.), Kerala Forest Department, Thiruvananthapuram, 1991, pp. 174-180.
- Noyes, J. S., *J. Nat. Hist.*, 1982, **16**, 315-334.
- Soderstrom, T. R. and Young, S. M., *Ann. Mo. Bot. Gard.*, 1983, **70**, 128-136.
- Koshy, K. C. and Pushpangadan, P., *Curr. Sci.*, 1997, **72**, 622-624.
- Indira, E. P., *Silvae Genet.*, 1988, **37**, 5-6.
- John, C. K., Nadgauda, R. S. and Mascarenhas, A. F., *Curr. Sci.*, 1994, **67**, 685-687.

**ACKNOWLEDGEMENTS.** We thank Dr G. Sreekandan Nair, Director, TBGRI for facilities and encouragement. Financial assistance from Planning and Economic Affairs Department, Government of Kerala under Western Ghats Development Programme is gratefully acknowledged.

Received 12 April 2001; revised accepted 21 June 2001

## Erratum

### Induction of *in vivo* somatic embryos from tea (*Camellia sinensis*) cotyledons

Tapan Kumar Mondal, Amita Bhattacharya, Madhu Sharma and Paramvir Singh Ahuja

[*Curr. Sci.*, 2001, **81**, 297-300]

Figure 2 b of microtome is of Kangra Jat origin of somatic embryo but not UPASI-9 and the same did not occur in moist sterile and sand. We regret the error.

Authors