

- AYALA, F. J. 1973. Two new subspecies of the *Drosophila willistoni* group (Diptera: Drosophilidae). *Pan-Pacific Entomol.*, vol. 49, pp. 273-279.
- CHAMBERS, S. M. 1978. An electrophoretically detected sibling species of '*Gonio-basis fortdensis*' (Mesogastropoda: Pleuroceridae). *Malacologia*, vol. 17, pp. 157-162.
- CHRISTENSEN, B. & JELNES, J. E. 1976. Sibling species in the oligochaete worm *Lumbricillus rivalis* revealed by enzyme polymorphism and breeding experiments. *Hereditas*, vol. 83, pp. 237-244.
- GRASSLE, J. P. & GRASSLE, J. F. 1976. Sibling species in the marine pollution indicator *Capitella* (Polychaeta). *Science*, vol. 192, pp. 567-569.
- HENRIKSEN, U. B. & JELNES, J. E. 1980. Experimental taxonomy of *Biomphalaria* (Gastropoda: Planorbidae) I. Methods for experimental taxonomic studies on *Biomphalaria* carried out by horizontal starch gel electrophoresis and staining of twelve enzymes. *J. Chromatogr.*, vol. 188, pp. 169-176.
- JELNES, J. E. 1979. Experimental taxonomy of *Bulinus*. II. Recipes for horizontal starch gel electrophoresis of ten enzymes in *Bulinus* and description of internal standard systems and two new species of the *Bulinus forskalli* complex. *J. Chromatogr.*, vol. 170, pp. 405-411.
- MANWELL, C. & BAKER, C. M. A. 1963. A sibling species of sea cucumber discovered by starch gel electrophoresis. *Comp. Bioch. Physiol.*, vol. 10, pp. 39-53.

(2) by Renaud Fortuner (Department of Food & Agriculture, 1220 N Street, Room 340, Sacramento CA 95814, U.S.A.)

A zoological name published after 1930 is available only if it is 'accompanied by a description or definition that states in words the characters that are purported to differentiate the taxon' (Article 13a(i)). The type affords the standard of reference that determines the application of the name (Article 61). It is evident that the differentiating characters given in the original description of a taxon must be visible in the type of this taxon. This is generally the case in taxa described and differentiated from purely morphological data. If a scientist suspects errors in the description of a taxon he may study his type and propose his own interpretation of the morphological data.

2. Nowadays, however, more and more non-morphological characters are used to differentiate new taxa. Recently the nematode species *Radopholus citrophilus* was established by Huettel, Dickson & Caplan, 1984 (*Proc. helminthol. Soc. Washington*, vol. 51, pp. 32-35) and differentiated by its chromosome number and by seven diagnostic loci in starch gel electrophoresis. These characters are not visible in the traditional glycerine mounts that constitute the type and the type series of the new species.

3. I ask the Commission to study this problem and to provide means for checking the accuracy of the description of a new taxon based on such non-morphological criteria. The type series might be allowed to include photographs or permanent mounts showing chromosomes or protein migration; or a living culture of the type population might be maintained, from which fresh specimens could be taken and processed to verify chromosomes or proteins. Whatever solution is eventually found, I think it is important to give the new criteria equal status with the traditional morphological criteria.