HYLA FEMORALIS CHRYSOSCELIS COPE, 1880 (AMPHIBIA, ANURA): REQUEST FOR DESIGNATION OF A NEOTYPE. Z.N.(S.)2366

By Hobart M. Smith, Kevin T. Fitzgerald & Louis J. Guillette, Jr. (*Department of EPO Biology, University of Colorado, Boulder, Colorado 80309, U.S.A.*)

Over the past 44 years extensive research by many observers and experimental biologists has documented the previously unsuspected co-existence in much of the eastern United States of two extremely similar, hence cryptic, species of treefrog, one diploid, the other tetraploid. It has recently been discovered (Fitzgerald, Smith & Guillette, 1981, *J. Herpetol.*, vol. 15, pp. 356–360) that the name that has become universally accepted over the past 20 years for the diploid species, *Hyla chrysoscelis* Cope, 1880 (originally as *Hyla femoralis chrysoscelis, Bull. U.S. nat. Mus.* no. 17, p. 29) is based upon a holotype representing the tetraploid species *Hyla versicolor* Le Conte, 1825. It is the purpose of this request to suspend application of the automatic provisions of the Code in relation to the name *chrysoscelis*, since otherwise, under the provisions of the Law of Priority (Art. 23), a different name would have to be used for the diploid species.

2. Only one name junior to *chrysoscelis* Cope, 1880 exists for the diploid species: *Hyla versicolor sandersi* Smith & Brown, 1947 (*Proc. biol. Soc. Washington*, vol. 60, pp. 47–50). Its proper applications to the diploid species is incontrovertible. However, it was used as a valid name only once after 1947 (Schmidt, 1953), hence its resurrection would not be in the interests of nomenclatural stability. To substitute *sandersi* for *chrysoscelis* that has been used consistently, frequently, and in many different fields of endeavour for the past 20 years would be an unnecessary cause of confusion, irritation and regulatory alienation of a large body of professional and amateur zoologists, mostly non-taxonomists, and would have no redeeming features.

3. We estimate, very conservatively, that at least 75 usages of *chrysoscelis* have occurred in different works since 1961, when the name was formally revived in its present sense. No name was adopted by Johnson in 1959 when he revived the species, and although he adopted the name in his doctoral thesis in 1961, as cited by several authors, he did not revive the name in a nomenclaturally valid way until his dissertation abstract appeared later the same year.

4. The name *chrysoscelis* was not used after 1880 until it was revived in 1947 by Smith & Brown for a subspecies of the species (*versicolor*) later found to be the tetraploid member of the diploid-tetraploid complex. Only one other use of the name (Schmidt, 1953) has occurred in that sense.

5. Among the 75 or more usages in different works of *chrysoscelis* for the diploid species are the following 38 that we regard as especially important: Bachman & Bogart, 1975; Becak et al., 1973; Behler & King, 1979; Boernke, 1975; Bogart & Jaslow, 1979; Bogart & Wasserman, 1972; Brown & Brown, 1972; Cash & Bogart, 1978; Conant, 1975; Duellman, 1977; Dunlap, 1963; Fellers, 1979a, b; Fortman, 1974; Fortman & Altig, 1974; Gerhardt, 1974a, b, 1975, 1978; Green, 1980; Jaslow & Vogt, 1977; Johnson, 1961, 1963, 1966; Maxson, Pepper & Maxson, 1977; Mecham, 1965; Pierce, 1975; Pierce & Ralin, 1972; Ralin, 1968, 1976a, b, 1977, 1978; Ralin & Rogers, 1979; Ralin & Selander, 1979; Smith, 1978; Wasserman, 1970; Zweifel, 1970. (These references are held on the file in the Commission's office. Editor).

6. In addition, many state and local lists or reviews, ecological accounts, locality records, range extensions, popular and amateur works have used the name *chrysoscelis* in the same sense during the same period. The total literature is thus extremely diverse in nature, only a small proportion strictly taxonomic, but a large part experimental, anatomical, histological, biochemical, ecological, ethological and, equally importantly, highly popular field guides (e.g. Behler & King, 1979; Conant, 1975; Smith, 1978).

7. The relative brevity (20 years) of the period of universal adoption of the name *chrysoscelis* for the diploid species is offset by the astonishing frequency and diversity of its usage and the use of only that name for the diploid species once it was recognised as distinct from the slow-call, tetraploid species.

8. We therefore propose that the Commission use its plenary powers to set aside Cope's type designation for his subspecies *Hyla femoralis chrysoscelis* (Acad. nat. Sci. Philadelphia, no. 13762, Dallas, Texas) and to substitute for it the holotype of *Hyla versicolor sandersi* (U.S. Nat. Mus. no. 123978, 8 miles S.W. of Somerset, Atascosa County, Texas). The name *sandersi* would thereby become a junior objective synonym of *chrysoscelis* which would become incontrovertibly valid for the diploid species so long known under that name.

9. We accordingly ask the International Commission on Zoological Nomenclature

(1) to use its plenary powers
  (a) to set aside the original designation of type specimen for *Hyla femoralis chrysoscelis* Cope, 1880, and
  (b) having done so, to designate USNM no. 123978 as neotype of that taxon;
(2) to place the species-group name *chrysoscelis* Cope, 1880, as published in the trinomen *Hyla femoralis chrysoscelis,* and as interpreted by reference to the neotype designated under the plenary powers in (1)(b) above, on the Official List of Specific Names in Zoology.