Comment on the proposed conservation of the specific name of *Diemenia atra* Macleay, 1884 (currently *Demansia atra*; Reptilia, Serpentes) (Case 2920; see BZN 54: 31–34).

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I am writing to oppose the proposal by Prof Hobart Smith and Dr Van Wallach. They argue that the change of name of the Black Whip snake from *Demansia atra* to *D. vestigiata* would threaten nomenclatural stability for five reasons related to the long history and frequent usage of the former name, the desirability of stability in the nomenclature of venomous snakes, and the relative condition of the type material and accuracy of type localities. I disagree with several of their arguments, which do not take into account the unusually complex nomenclatural history and difficult taxonomy of the genus.

1. Smith & Wallach argue that herpetologists have long been familiar with the name Demansia atra, and indeed it has been frequently used for the species in question. However, for over a century, from Krefft (1869) to Cogger (1971), the species was most commonly known as Demansia (or Diemenia) olivacea (Gray, 1842). That name was transferred to a different, much smaller species by Cogger & Lindner (1974). The latter species had been known as D. ornaticeps for the same period. Smith & Wallach do not make it clear that the name olivacea was changed in its application from one species to another. During this period, specimens now referred to the larger species, the Black Whip snake, were also variously identified as D. psammophis (see Krefft, 1869; Boulenger, 1896); and D. psammophis (or olivacea) papuensis (see Slater, 1956, 1968; Klemmer, 1963). North-eastern Queensland populations of the Black Whip snake were treated as varietally distinct (D. olivacea var. atra) from populations elsewhere in Australia by Kinghorn (1929) and Worrell (1952). The works cited above include the major standard Australian and international reference works and checklists of the time. Early venom studies (Kellaway, 1934) also used the name D. olivacea for the species.

The resurrection of *Diemenia atra* from synonymy by Cogger & Lindner (1974) was necessary because the name *D. olivacea* was demonstrated to be applied to the wrong species. However, because of uncertainty about the identity of New Guinea populations of *Demansia*, the name *D. atra* was 'arbitrarily' used (see Cogger & Lindner, 1974, p. 93) for Australian populations, and *D. papuensis* (Macleay, 1877) was applied to New Guinea populations. Cogger & Lindner did not report examining type specimens. New Guinea populations have since been referred to on several occasions (Storr, 1978; Parker, 1982; Wells & Wellington, 1985; Wilson & Knowles, 1988; Cogger, 1992, 1996; Ehmann, 1992) as *D. papuensis*.

A taxonomic complication was revealed by Storr (1978), who demonstrated that there were two species of Black Whip snakes in north-western Australia, to which he applied the names *D. atra* and *D. papuensis melaena*. Subsequent workers (Longmore, 1986; Wilson & Knowles, 1988; Cogger, 1992; Ehmann, 1992) have been uncertain as to the differentiation of these two species in north-eastern Australia, and consequently the extent of their distribution. Storr (1978) also reidentified the

only Black Whip snake examined by Cogger & Lindner (1974) as D. papuensis melaena.

A recent study (Shea, in press) of variation in Black Whip snakes throughout their range has revealed that the two species are widespread with broadly overlapping distributions across northern Australia, and that all previous Australian studies for which the specimen basis is identifiable were based on composite series of the two species. These include both taxonomic accounts (Thomson, 1935) and ecological studies (Shine, 1980). Moreover, and providing further potential confusion, there is no good evidence that *D. papuensis* occurs in Papua New Guinea since all New Guinean specimens appear unequivocally referrable to the species that is the subject of this case.

It is apparent that there is both little stability in the names applied to the Black Whip snakes and great confusion as to the identification of the different species of Black Whip snakes. The argument that the name *D. atra* has been consistently applied to a single species is spurious; the resurrection of *D. atra* by Cogger & Lindner (1974) was based on a single incorrectly identified specimen, and an arbitrary, unsupported and ultimately incorrect decision to recognise Australian and New Guinean populations as distinct.

- 2. Against this background of uncertain and inconsistent application of names, Ingram (1990) demonstrated that the name Hoplocephalus vestigiatus De Vis, 1884 antedated D. atra Macleay, 1884. Smith & Wallach maintain that H. vestigiatus remained in the synonymy of Austrelaps superbus until 1990, when Ingram resurrected it. However, its identity with the species previously known as Demansia olivacea and then as Demansia atra was clearly noted by Mack & Gunn (1953), Covacevich (1971) and Cogger, Cameron & Cogger (1983). Smith & Wallach further argue that since its resurrection, D. vestigiata has been used as the available name for the species concerned on only three occasions (although they give the full reference to only two of these). However, since 1990, the name has also been used in papers on ecology (Covacevich, Roberts & McKinna, 1994), vertebrate survey reports (Williams, Pearson & Burnett, 1993a, 1993b), field guides (Covacevich & Wilson, 1995), popular books (Healey, 1997) and international checklists (Golay, 1993). In contrast, since 1990 the name D. atra has been used for the species in seven publications (Cogger, 1992, 1996; Ehmann, 1992; Mirtschin & Davis, 1992; Shea, Shine & Covacevich, 1993; Swan, 1995; O'Shea, 1996). Hence, there is no clear preference for one name over the other in recent literature.
- 3. Smith & Wallach argue that the type material of *D. atra* is in better condition than that of *H. vestigiatus* and that the type locality is more precise. They did not examine the types concerned, and base their argument on the literature. The type specimens of both names are illustrated by Shea (in press). The holotype of *H. vestigiatus*, although having suffered some damage, is still easily identifiable as belonging to the same species as that of *D. atra*. Indeed, discounting points of damage to the tail, neck and throat (which do not hamper identification), the holotype is in a similar state of preservation as the lectotype of *D. atra*. Despite the lack of a type locality, there is no doubt of the species to which the name *H. vestigiata* applies: a species widespread across northern Australia and in southern New Guinea (not just northern Queensland, contra Smith & Wallach).
- 4. Notwithstanding the above discussion, it is clear that the present situation where two names are currently applied to one species is undesirable. However, the

instability and confusion as to the application of names and identity of species is a reflection of a lack of previous detailed taxonomic studies using large samples (Shea, in press). Given that the first thorough analysis and discussion of the taxonomic and nomenclatural issues is about to appear, I believe that the application of strict priority in this case will best facilitate future stability of nomenclature of the species, and appreciation of its complex and historically unstable nomenclature. Consequently, I urge the Commission to reject the application by Smith & Wallach to suppress the name *vestigiatus* for the purposes of the Principle of Priority.

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