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Ankumia van Veen, 1932: a valid name, but a flawed generic concept (Ostracoda, Platycopina, Cytherelloidea)

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Recent study of the syntype material of the type species of the monotypic genus *Ankumia* van Veen, 1932 (*A. bosqueti* van Veen, 1932) confirmed a pathological retention of moults, expressed by multilayered ridge-like structures, used for the original diagnosis of the genus (Jones, 2003). For this reason, it was proposed that the genus *Ankumia* should be abandoned as a *nomen dubium* in favour of *Platella* Coryell & Fields, 1937. This interpretation was challenged by Malz & Lord (2004), who saw no reason to treat *Ankumia* as *nomen dubium* and, acknowledging the unequivocal cytherellid nature of the species, posed and addressed two taxonomical questions: (1) do pathological individuals of cytherellids justify specific and/or generic ranking?; (2) why should *Ankumia* be abandoned in favour of *Platella*?

In addressing their first question, Malz & Lord (2004) correctly answered in the negative. However, they claimed that '… demonstration of a corresponding "normal" species (including "pathological individuals") among the associated cytherellids is wanting'. The author disagrees with this statement because he described and illustrated two morphological shell-types among the specimens assigned as syntypes of *Ankumia bosqueti* in the van Veen/Bonnema collection.They are the '*Cytherella* shell-type' (Jones, 2003, pl. 1, figs 2–8) and the '*Ankumia* shell-type' (Jones, 2003, pl. 1, fig. 1; pl. 2 figs 1–14), which correspond to the 'normal' species, and to the pathological individuals of that species, respectively. The *Ankumia* shell-type possesses concentric ribs that become progressively thinner from the adult to the juvenile stages. Of the 22 syntypes studied, 13 are cytherellid shell-type and 9 are *Ankumia* shell-type, a proportion that suggests (at least to this author) a pathological cytherellid ontogeny/physiology, rather than a 'normal' aspect of ankumian ontogeny/physiology. Furthermore, the disproportionate number of juvenile instars (13 cytherellid shell-type) relative to adults with moult retention (6 *Ankumia* shell-type) supports the concept that moult retention in *Ankumia* is a pathological phenomenon, and not a unique type of ecdysis within the Ostracoda.

Because individuals of the '*Cytherella* shell-type' could not be identified confidently with any species of the associated cytherellids (e.g. *Cytherella foveata* van Veen, 1932, *Cytherelloidea*? *dubia* van Veen, 1932), they were regarded (and the pathological individuals) as a species in their own right. With regard to the name of the species, *Ankumia bosqueti* van Veen, 1932 is legally valid and available in terms of the International Code of Zoological Nomenclature (Jones, 2003; Malz & Lord, 2004). However, despite the Code-compliance and, hence, availability of the name, the concept on which the genus *Ankumia* was based is seriously flawed, because the multilayered ridge-like structures, used for its original diagnosis, are the result of moult-retention (Jones, 2003). Although little is known of the physiological mechanism that causes moult retention in ostracods, the phenomenon is accepted as pathological (Jones, 2003). From Occam's razor principle, ecdysis is the known (normal) ostracod condition, in contrast to any special pleading that the ankumian condition is a unique case of ostracod ecdysis. Despite the legal validity of the name *Ankumia,* the concept on which it is based contradicts present knowledge of normal ostracod biology.

The second question posed by Malz & Lord (2004) relates to the author's problem as to generic assignment of the species *bosqueti* van Veen, 1932. The author agrees with Malz & Lord (2004) that *Ankumia* should not be treated as *nomen dubium*, and concurs with their comments on the questionable taxonomic status of the type species of *Platella* (*P. gatunensis* Coryell & Fields, 1937; Gatun Formation, Panama Canal Zone). Dr Kerry Swanson (pers. comm.) noted that subsequent authors have changed the original definition of *Platella* over time. He pointed out that any of the characters quoted by authors who still promote *Platella* can be found on species of *Cytherella*, e.g. the sulcus on the type species is not unusual for a platycopid and, in fact, there is a range of sulci in terms of strength/depth in recently described deep-sea assemblages (Jellinek & Swanson, 2003).

In conclusion, given the platycopid (cytherellid) features of *Ankumia bosqueti* van Veen, 1932, the presence of multilamellar (retained moult) individuals within the syntypic series represents a pathological condition, which does not justify the recognition of *Ankumia* as a distinct genus. The presence of normal individuals of *Cytherella* within the syntypic series of *Ankumia bosqueti* van Veen, 1932 indicates the species belongs to the genus *Cytherella* Jones, 1849. Therefore, it is suggested that the genus *Ankumia* van Veen, 1932 should be replaced, as a biological concept, by its senior synonym, the genus *Cytherella* Jones, 1849.

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