

Crinoids from the Famennian of the Holy Cross Mountains, Poland

Edward Głuchowski *Acta Palaeontologica Polonica* 47 (2), 2002: 319-328

Disarticulated crinoid columnals and pluricolumnals from the Famennian of the Holy Cross area were analysed. Sixteen crinoid taxa were distinguished, only one of which is based on stems attributed to a calyx-based genus, and the others are classified within artificial supraspecific units. Two of these are new: *Schyschcatocrinus levis* sp. nov. and *Cosmocrinus polonicus* sp. nov. The described crinoid fauna shows distinct extinction-recovery temporal pattern: the Frasnian-Famennian crisis affected 50% of stem-based families and 70% of late Frasnian stem-based genera. The succession of crinoid faunas represented by three faunal intervals has been identified and correlated to standard conodont zones: FIa, *Palmatolepis triangularis* Zone (relic "Frasnian" crinoid assemblage *Schyschcatocrinus delicatus-Calleocrinus kielcensis*), FIb, Pa. crepida to *Pa. marginifera* zones (crinoid assemblage *Calleocrinus kielcensis-Schyschcatocrinus levis*) and FIc, Pa. trachytera to *S. praesulcata* zones (crinoid assemblage *Cosmocrinus polonicus-Acbastaucrinus affectatus*). The succession was controlled mostly by eustatic factors.

Key words: Crinoidea, Famennian, Holy Cross Mountains, extinction, recovery.

Edward Głuchowski [egluchow@wnoz.us.edu.pl], Wydział Nauk o Ziemi, Uniwersytet Śląski, ul. Będzińska 60, PL-41-200 Sosnowiec, Poland.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see <u>creativecommons.org</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.