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Conodont distribution across the Kačák crisis from the shallow marine Kellergrat Formation and the pelagic Valentin Formation (Carnic Alps)

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The Kellergrat Formation (KREUTZER, 1992) represents a unit consisting mainly of reef deposits (frame and rudstones). A Givetian to Frasnian age was proposed by OEKENTORP-KÜSTER & OEKENTORP (1992) based on coral assemblages from the Kellergrat area and other two localities. Conodont data from the abandoned quarry at the trail 149 to Collina (HUBMANN et al., 2003) confirm Givetian age of the coral-rich limestones. 14 samples between 0.5-3 kg are dissolved in HCOOH. All of them yield a small but determinable conodont fauna. Apart from icriodontid conodonts such as *Icriodus regularicrescens* and polygnathids of the *Polygnathus linguiformis* group, samples from the base of the section yield Pa elements of *Polygnathus ensensis*, which indicates latest Eifelian. These beds are less rich in corals but do bear stromatoporoids. A few meters higher in the section, Pa elements of *Polygnathus timorensis* and *Polygnathus varcus* are obtained, which indicate early Givetian age of already coral-rich deposits. Generally, diversity and abundance of conodonts in this section is quite low, which might be due to depositional conditions.

Moving from proximal, reef-related deposits down the slope, stratigraphically equivalent pelagic deposits are represented by the condensed limestones of the Valentin Formation. The type section of this unit is outcropping near Valentin Törl, located a few km towards NW in the Valentin Valley (previously called the Wolayer Glacier section, SCHÖNLAUB et al., 2004). Here dense conodont sampling was done bed-by-bed in the 1980's (SCHÖNLAUB, 1980). According to the strongly condensed kind of bedding, we decided to resample the late Eifelian-Givetian interval with the aim of a higher resolution biostratigraphy. Therefore, we cut each bed along iron-crusts demarcating sedimentary breaks or erosional bedding plane surfaces, which are observed rhythmically nearly each cm. Finally, it turned out that bed 69 and 70 belongs to the late Eifelian, which is indicated by the occurrence of elements belonging to the *Polygnathus angusticostatus* group and the entry of *Icriodus obliquimarginatus*. Bed 71 belongs already to early Givetian indicated by the first occurrence of *Polygnathus timorensis*. This is actually nothing new and already known since Schönlaub 1980. However, new is that we achieved a higher resolution within beds 69 and 70. It turned out that both beds yield a conodont fauna typical for the *kockelianus* Biozone, but that from the base of bed 70 *Icriodus obliquimarginatus* together with strangely grown icriodontid Pa elements (transition forms between *Icriodus* and *Pelekysgnathus*) occur. That, according to BULTYNCK (2003), is a common feature of icriodontids during biotic events, which in our section indicates the onset of the late Eifelian Kačák Event.

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