

DISUSED CRETACEOUS REGIONAL STAGE FROM BELGIUM: HERVIAN

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ABSTRACT. An overview of the definition and history of the Hervian is given with the argumentation for the abandonment of this disused regional stage.

KEYWORDS: Hervian, Belgium, Cretaceous, Smectite, Campanian.

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1. Definition and history

Together with a large number of other *systèmes*, Dumont (1850) introduced the term *Hervian*. This term corresponded with the period of deposition of the *Smectite de Herve* (a glauconitic marly/sandy rock unit of the Upper Cretaceous of the Herve area in NE Belgium), which had previously been introduced by d'Omalius d'Halloy (1828). According to its fossil content the age of this rock unit was known to be Early Campanian (Marlière 1957, *In Lexique Stratigraphique International*).

Since the *Smectite de Herve* proved to be an easily correlatable lithostratigraphic unit, the term Hervian has been relatively frequently used in the Belgian and Dutch geological literature during the 19th and the 20th century (e.g. Briart & Cornet, 1875; Forir, 1892; Rutot, 1905; Vandepoel, 1956, 1959; Corin, 1965).

2. Why the Hervian is not an international stage

As with most of the "*systèmes*" introduced by Dumont, no type section had been indicated by the author. The rock unit chosen to represent this stage was a shallow shelf deposit that only represented a limited time of deposition (i.e. roughly the sedimentation period of a single transgressive sequence, or third order cycle). Moreover it was only outcropping in a limited area of NE Belgium and of the adjacent part of the Netherlands. The observable stratigraphic sections thus only represent a very small part of the (13 Ma long lasting) Campanian stage (83.5 Ma – 70.6 Ma, cf. Gradstein *et al.*, 2004), which has now internationally been accepted.

3. The status of the name

For the above reasons the use of the Hervian as stage has since a long time been abandoned in Belgium. Lithostratigraphically, the unit now corresponds to the upper part of the Vaals Formation (Robaszynski *et al.*, 2001).

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