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# Correction to: New insights on the Early Cretaceous (Hauterivian–Barremian) Urgonian lithostratigraphic units in the Jura Mountains (France and Switzerland): the Gorges de l'Orbe and the Rocher des Hirondelles formations

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## Correction to: *Swiss J Geosci* (2021) 114:18

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Following publication of the original article (Pictet 2021), Dr. Pierre-Olivier Mojon protested officially about his past collaboration being ignored according to him and about the inappropriate use of his ostracod data. The publication of this erratum is thus necessary in order to clarify these points, correct inaccuracies and indicate clearly the sources of ostracod data lacking in the caption of figure 2, as the used references are only mentioned in a dispersed way within the main text.

Despite a long lasting and fruitful collaboration between Dr. A. Pictet and Dr. P.-O. Mojon, major disagreements on the interpretation of the stratigraphic succession of the “Urgonian” deposits of the Swiss and French Jura hindered the collaborative redaction of a common, broad synthetic publication encompassing both the lithostratigraphic framework and new age constraints based—among other proxies—on ostracods and charophytes, two fossil groups for which Dr. P.-O. Mojon was originally involved.

Since the publication of a revised lithostratigraphic scheme for the Cretaceous deposits of the Swiss and

French Jura at the formation level (Strasser et al., 2016), it became clear to Dr. A. Pictet that further investigations and refinements were needed as concerns the Gorges de l'Orbe and Vallorbe formations, as defined at that time. Based on extensive personal field and laboratory work the author already outlined a new scheme in 2017, which was progressively consolidated as new data kept on accumulating and through consultation with several experts (as notably Dr. P.-O. Mojon). The Swiss Committee on Stratigraphy also validated the formal proposal for the subdivision and naming of this stratigraphic interval by Dr. A. Pictet in 2020 and 2021.

Simultaneously to the work mentioned above, Eric De Kaenel, Pierre-Olivier Mojon and Antoine Pictet (De Kaenel et al., 2020) published a first local study, where Dr. A. Pictet's conception of the lithostratigraphic succession is not considered, both because it was not the main topic of this article and because of growing discrepancies in their respective approaches on the “Urgonian” problematic. Their collaboration formally ended after the publication of this article. By completion of Dr. A. Pictet's synthetic manuscript in spring 2021, the author took however again contact with Dr. P.-O. Mojon to invite him for a co-authorship. Although Dr. P.-O. Mojon did not reject this proposal, his reply and the heavy reconsideration requested for the proposed scheme and interpretation made it clear that a co-authorship was not possible. Consequently, in the

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version finally submitted to the *Swiss Journal of Geosciences* by Dr. A. Pictet, the author removed the name of Dr. P.-O. Mojon and consequently all his potential contributions as unpublished ostracod data, incorporating only the names and extensions of ostracods as published in the cited literature, be they up-to-date or not. Nonetheless, the past collaboration with Dr. P.-O. Mojon is clearly mentioned in chapter 2 “Materials and methods” rather than in the acknowledgments, in order to make it clear to the reader that Dr. P.-O. Mojon has not approved the use made of the raw ostracod data, as published in the literature, which is obsolete according to his views. Finally, the intents of Dr. P.-O. Mojon, as cited in the sentence “*A detailed and up to date study of the ostracods of the Urgonian facies will be published by Dr. P.-O. Mojon.*”, was a presumption.

As a single author, Dr. A. Pictet therefore fully assumes all statements and interpretations based on his research activity and on compilation of data from the literature, cited according to current practice. Dr. P.-O. Mojon is in no way responsible for any obsolete, inaccurate or incorrect taxonomic and/or biostratigraphic information about any of the ostracods cited in Pictet (2021). Dr. A. Pictet would like to apologize for any inconvenience or confusion that may have resulted from the unfortunate course of events depicted above.

About figure 2, some errors went unnoticed through the publication process regarding the ostracods and their extensions, as published in the literature. All ostracod data transcribed in this figure are listed in the text with the corresponding bibliographic references. On the other hand, the figure 2 caption is lacunar and a complement is therefore necessary. The inaccurate data about the ostracods concerns notably:

- i. *Rehacythereis bernardi* (Grosdidier, 1964) is known in the Hauterive Member (Marnes d’Hauterive) but not in the Uttins Marls (Marnes des Uttins) following the existent literature;
- ii. *Paracypris* sp. is reported in the Uttins Marls by Strasser et al. (2018) but not in the Hauterive Member further down, but is cited in the lower Valanginian series (Pasquier et al., 2013);
- iii. *Schuleridea extranea* Grosdidier, 1964 is only reported in the Uttins Marls by Oertli (1989) but not in the Hauterive Member further down, as also mentioned in Strasser et al. (2018);
- iv. Ostracods observed in the Vauglène Beds by Pictet et al. (2019) were erroneously placed in the Poet Bed in figure 2.

The caption of figure 2 must be completed as follows:

Fig. 2: Ammonite zones according to Reboulet et al. (2018) and biostratigraphic distribution of main fossil groups in the Hauterivian–Barremian series of Jura Mountains, the macrofossils were collected by the author or from museum collections. The data of the ostracod species and their extensions are based on Oertli (1989), Pasquier et al. (2013) and Strasser et al. (2018) for the Hauterivian series; on Clavel et al. (1994), Sauvagnat et al. (2001), Pasquier et al. (2013), Mojon et al. (2013), De Kaenel et al. (2020) and Eichenberger et al. (2020) for the Bôle and Rivière members, and on Pictet et al. (2019) for the Bellegarde Bed.

Dr. P.-O. Mojon draws attention to additional information unknown to the author:

- i. *Protocythere triplicata* (Roemer, 1841) is present until the “basal Aptian” (Vauglène Beds) according to Sauvagnat (1999);
- ii. *Bairdia* aff. *acuminata* Wilkinson, 1988 as cited in Sauvagnat et al. (2001, p. 86) is an invalid species name (“junior secondary homonym”) reported from the Palaeozoic (Carboniferous) species *Bairdia acuminata* Cooper, 1946 of North America, therefore completely unrelated with the Early Cretaceous of Europe and whose author is not Wilkinson (1988);
- iii. *Strigosocythere? reticulata* is a younger synonym of Sauvagnat (1999) for the very important biostratigraphic marker *Strigosocythere chaililovi* (Kuznetsova, 1961) as clearly reported and indicated by Babinot and Colin (2011, p. 742), and the stratigraphic extension of the species extends only from the top of the Bôle Member (Eichenberger et al., 2020; De Kaenel et al., 2020) and in the Rivière Member (*Strigosocythere? reticulata* according to Sauvagnat et al., 2001) to the Vauglène Beds of the Perte-du-Rhône Formation further up (Pictet et al., 2019);
- iv. Most of the ostracods of the Vauglène Beds listed in Pictet et al. (2019) are also present in the Poet Bed, excepted *Protocythere derooi* Oertli, 1958.

**N.B.** The Poet and Vauglène beds were both originally defined in the plural form (Pictet et al., 2016). The use of the singular form for the Poet Bed stresses its landmark character (hence with Bed rank) compared to the overlying marly levels of the Vauglène Beds (equivalent to the very informal term “couches” or “Schichten”).

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