

# Valbertad Formation

HANS-PETER SCHÖNLAUB & LUCA SIMONETTO

Österreichische Karte 1:50.000  
Blatt BMN 197 Kötschach  
Blatt BMN 198 Weißbriach  
Blatt BMN 199 Hermagor

Carta Topografica d'Italia 1:50.000  
Foglio 018 Passo di Monte Croce Carnico  
Foglio 031 Ampezzo  
Foglio 032 Tolmezzo  
Foglio 033 Tarvisio

Blatt UTM 3109 Oberdrauburg  
Blatt UTM 3110 Kötschach-Mauthen  
Blatt UTM 3116 Sonnenalpe Naßfeld  
Blatt UTM 3117 Nötsch im Gailtal

## Definition

Grayish, brownish and greenish siltstones to arenaceous shales and rare fine-grained graywackes and sandstones.

## Description

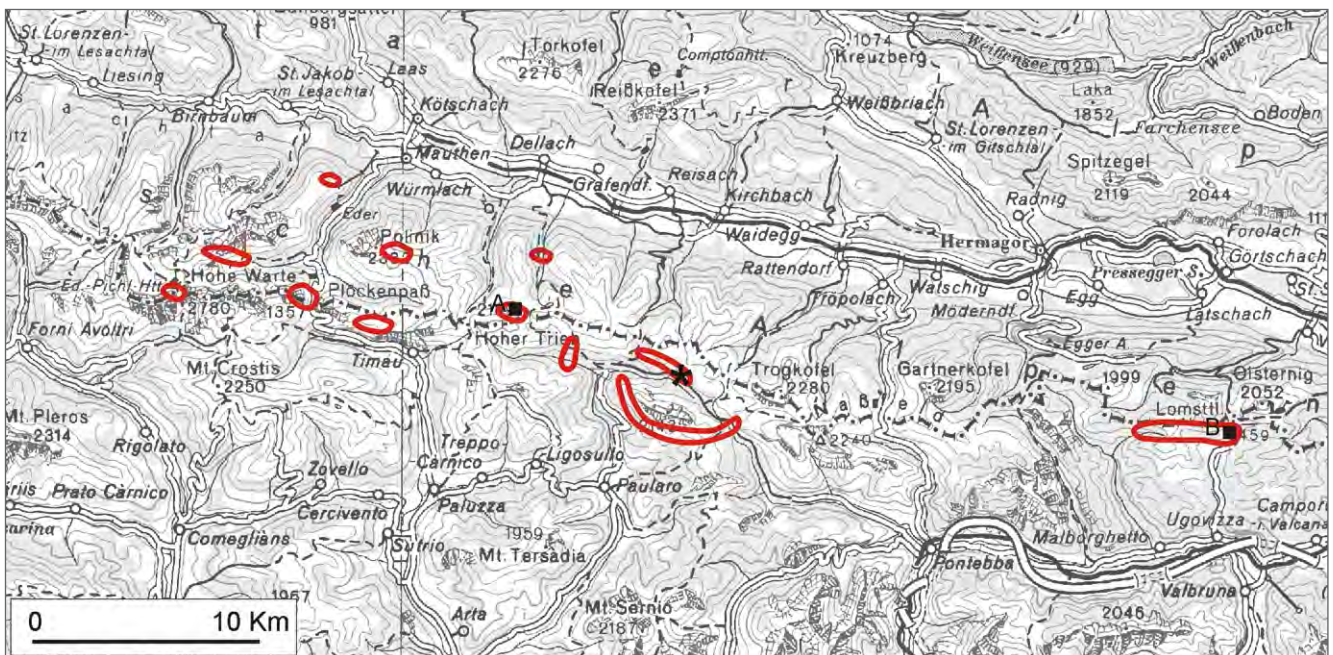
The Valbertad Formation consists of thin to very thin-bedded grayish, brownish and greenish siltstones to arenaceous shales. Some horizons show indistinct bedding and are more compact resembling fine-grained graywackes and sandstones. Fossils, abundant in some levels, are more or less de-calcified. In the upper part of the unit, the shales are increasingly interbedded with thin to very thin nodules of gray mud- and wackestone.

## Fossil content

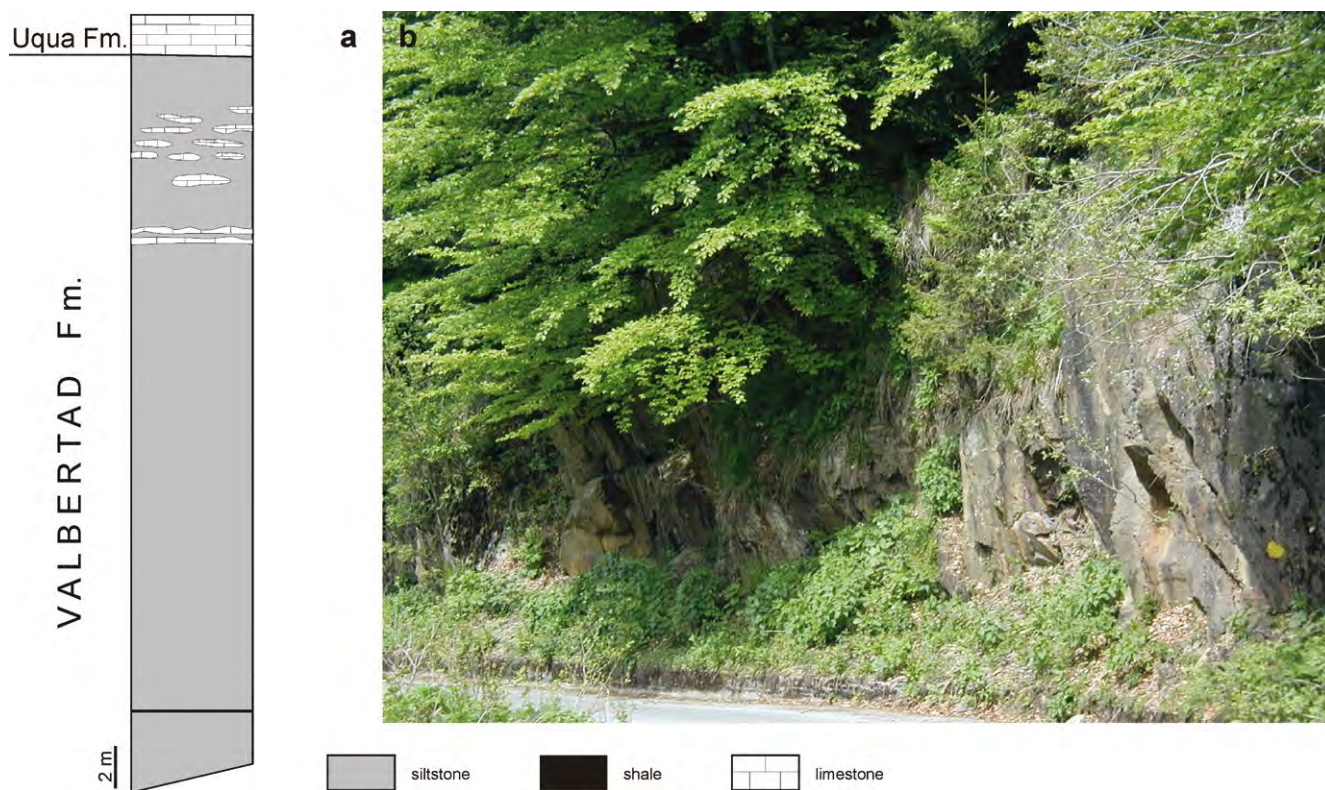
Acritarchs, brachiopods, bryozoans, cephalopods (nautiloids), cystoids, gastropods, hyoliths, tentaculites, trilobites.

## Depositional environment

Moderately deep marine environment.



Areas of outcrop of the Valbertad Formation with indication of the stratotype (asterisk) and reference sections (squares). A: Hoher Trieb Section; B: Rifugio Nordio Section.



The Valbertad Section. a) log of the section (redrawn after BAGNOLI et al., 1998); b) view of the section (photo L. SIMONETTO).

## Stratotype

Valbertad Section (BAGNOLI et al., 1998; CORRADINI et al., 2012) along the road from Paularo to Passo di Lanza at coordinates N 46°34'31.6", E 13°08'38.6".

## Reference sections

Uqua Creek Section, near Rifugio Nordio (VAI, 1971) north of Ugovizza at coordinates N 46°36'32", E 13°29'03", an important historical section.

Hoher Trieb Section (SCHÖNLAUB, 1969, 1971; JAEGER et al., 1975; HAVLICEK et al., 1987), north of Mt. Hoher Trieb/Cuestalta at coordinates N 46°36'02", E 13°03'10", particularly rich in fossils.

## Type area

Carnic Alps.

## Main outcrop areas

Northern part of Mt. Cellon (Cellonalm), Hoher Trieb, Base of Mt. Seekopf, northern side of Rio di Lanza valley, Mt. Piz-zul, Mt. Zermula, Uqua Creek.

## Thickness

15 m to more than 100 m.

## Boundaries

*Underlying units* – Fleons Formation (conformable? contact) (SCHÖNLAUB & FLAJS, 1993).

*Overlying units* – Uqua Formation (conformable contact).

*Lateral units* – Himmelberg Formation, Fleons Formation.



Views of the Valbertad Formation in the field. a) the outcrop on the top of Mt. Pizzul (photo L. SIMONETTO); b) cystoid in the Valbertad Section (photo L. SIMONETTO).

## Derivation of name

After Casera Valbertad.

## Synonymy

Strophomena Horizont: STACHE (1884).  
 Calcescisti, calcari saccaroidi ed argilloscisti di Mauthen [partim]: TARAMELLI (1895).  
 Scisti Ordoviciani: GORTANI (1926).  
 Scisti argilloso-ocracei con vene e noduli calcarei: GORTANI & DESIO (1927).  
 Uggwaserie: GAERTNER (1931).  
 Schiefer des Caradoc: HABERFELNER & HERITSCH (1932).  
 Formazione di Ugva: SELLI (1963).  
 Formazione di Uggwa: ASSERETO et al. (1968).  
 Sandige Schiefer mit Bryozoen: SCHÖNLAUB (1969).  
 Siltstones et Grès de L'Uqua: VAI (1971).  
 Formazione dell'Uqua: BRAGA et al. (1971).  
 Grünlichgraue Siltsteine der Stillwasser-Fazies: SCHÖNLAUB (1971).  
 Greygreen siltstones: SCHÖNLAUB (1971).  
 Sandig-pelitische Uggwafazies: SCHÖNLAUB (1979).  
 Formazione di Uqua: VAI et al. (1984), VENTURINI (1990).  
 Uggwa-Schiefer: SCHÖNLAUB (1985).  
 Uggwa-Schiefer/Shale: SUTTNER et al. (2014).

## Chronostratigraphic age

Ordovician: Katian, based on the brachiopod *Foliomena* Fauna (VAI, 1971; SCHÖNLAUB 1980; VAI & SPALLETTA, 1980; HAVLICEK et al., 1987; HARPER et al., 2009).

## Biostratigraphy -

## Complementary references -

## Remarks

In the western Karavanke Alps the equivalents of the Valbertad Formation are exposed in the Feistritzgraben section (SCHÖNLAUB, 1979, 1982, 1985).

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