

Lambertenghi Formation

SUSANNE M.L. POHLER, KLAUS BANDEL, ERIKA KIDO, MONICA PONDRELLI, HANS-PETER SCHÖNLAUB,
LUCA SIMONETTO & THOMAS J. SUTTNER

Österreichische Karte 1:50.000
Blatt BMN 197 Kötschach

Carta Topografica d'Italia 1:50.000
Foglio 018 Passo di Monte Croce Carnico

Blatt UTM 3109 Oberdrauburg

Definition

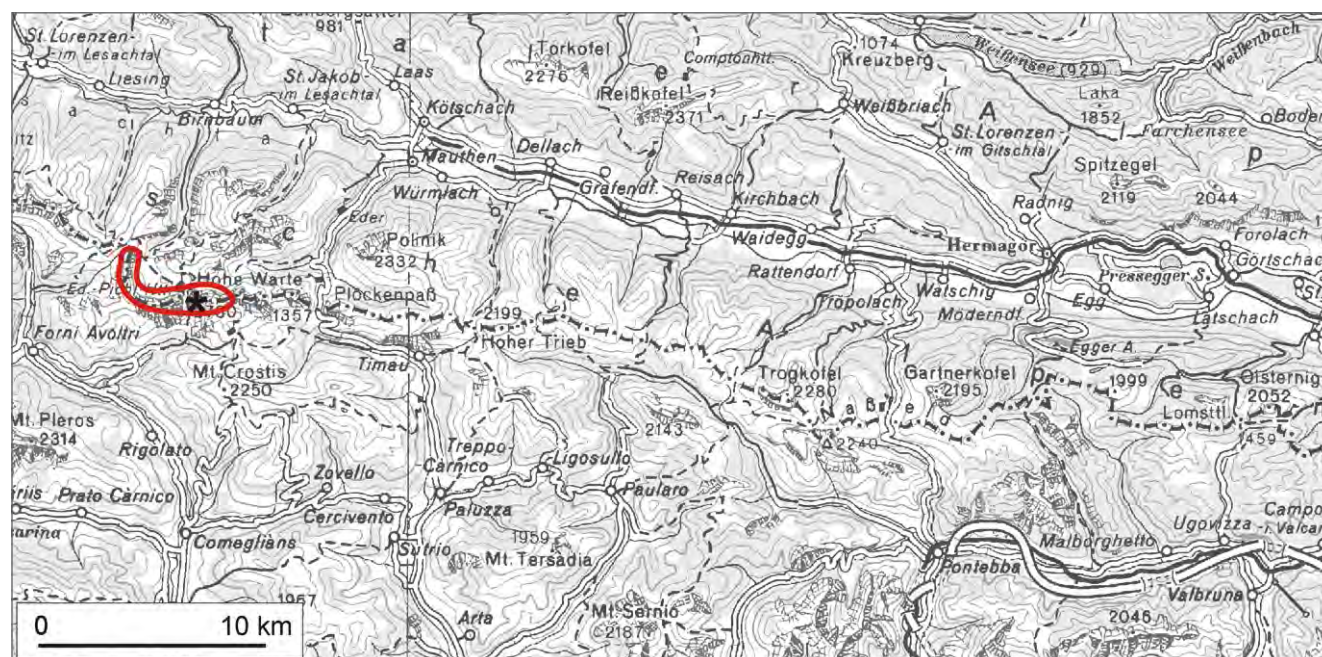
Well-bedded (0.5-3 m thick) gray fossiliferous limestones intercalated with laminated yellow-stained dolostone beds (10-30 cm thick). Common components are large oncoids and gastropods. Meter-long red mudstone layers, birdseye structures, graded bedding, flat-pebble lithoclasts and cavities lined with fibrous calcite are characteristic for this unit.

Description

The Lambertenghi Formation consists of thick-bedded dolomite-rich packstones to rudstones and laminites. The succession begins at the base of Mt. Seewarte above the dark-gray Seewarte Formation with abundant gastropods with vaguely bedded dense limestones intercalated with thin dolostone beds. Partially dolomitized oncoids and poorly sorted shell fragments can be recognized herein. The limestones become more fossiliferous up-section and stromatoporoids, calcareous algae and gastropods become abundant. The gray limestone beds measure between 0.5-3 m in thickness and the intercalated laminated dolostone beds are 0.1-0.3 m thick. Thin yellow-tinted beds are built by components where algal coats have been altered to iron-rich dolomite. Characteristic are graded beds with coarse bioclastic components and large oncoids which become finer-grained upwards and are succeeded by bindstones and fibrous calcite layers or cavities. Laminitic dolomite-rich beds often cap these successions. Infrequently lithoclastic beds with cm to dm-sized angular clasts of mudstone and sediment-filled cracks can be observed.

Fossil content

Calcareous algae, bivalves, brachiopods, rugose and tabulate corals, conodonts, echinoderms, foraminifers, gastropods, ostracods, stromatoporoids.



Areas of outcrop of the Lambertenghi Formation with indication of the stratotype (asterisk).



The Seewarte Section. a) simplified log of the Lambertenghi Formation; b) panoramic view of the Seewarte Section where Lambertenghi Formation is exposed at the base (photo T.J. SUTTNER).

Depositional environment

Sediments of the Lambertenghi Formation are indicative of deposition in shallow subtidal to intertidal hypersaline lagoon (BANDEL, 1972; POHLER, 1982).

Stratotype

Mt. Seewarte Section, western walls where base is exposed at coordinates N 46°36'22", E 12°52'15" (VAI, 1963; BANDEL, 1972; POHLER, 1982).

Reference sections -

Type area

Central Carnic Alps.

Main outcrop areas

The Lambertenghi Formation crops out mainly at Lake Wolayer (Hohe Warte, Seewarte, Seekopf) and Biegengebirge sectors. It is present in the Gamskofel Massif and possibly at Mt. Polinik.

Thickness

About 110 m at the stratotype section (Base of Mount Seewarte).

Boundaries

Underlying units – Seewarte Formation (conformable).

Overlying units – Spinotti Formation (conformable gradual, but faulted at type section).

Lateral units – Polinik Formation, Kellerwand Formation.

Derivation of name

After Rifugio Lambertenghi e Romanin in the vicinity of the Formations' stratotype at Mt. Seewarte (KREUTZER, 1992a, b).

Synonymy

Riffkalk-Facies der Stockwerke H-G-H [partim]: STACHE (1884).

Calcari con *Karpinskya consuelo*: GORTANI (1913).

Riffkalk mit *Karpinskya consuelo*: GAERTNER (1931).
 Strati (o Calcari) a *Karpinskya Consuelo*: DAL PIAZ & TREVISAN (1956).
 ZONA A *KARPINSKYA consuelo*: SELLI (1963).
 Consuelo-Laminit: VAI (1963).
 Schichten mit *K. consuelo*: PÖLSLER (1967).
 Gebankter Laminitkalk mit *Karpinskya consuelo*: SCHÖNLAUB (1971–1973).
 Onkoidkalke mit Algenkrusten: BANDEL (1972).
Consuelo Lst.: SCHÖNLAUB (1980).
Consuelo-Laminit-Kalk: SCHÖNLAUB (1985).
 Gebankte Laminitkalke: KREUTZER (1990).
 Laminit-Kalk: SCHÖNLAUB (1991).
 Laminierte geschichtete Kalke und Dolomite: SCHÖNLAUB (1991).
 Lambertenghi-Kalk: KREUTZER (1992b).

Chronostratigraphic age

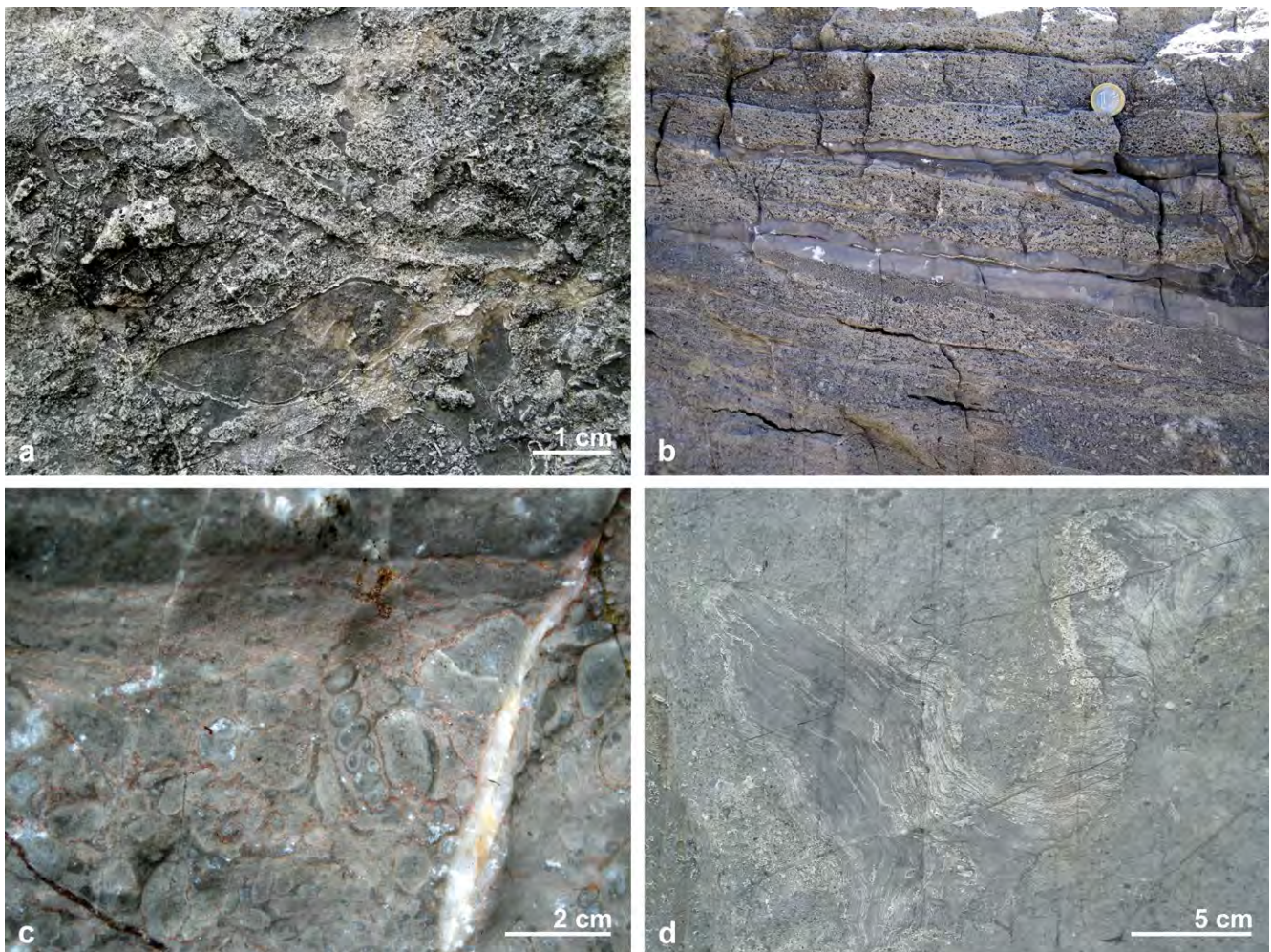
Devonian: Emsian (VAI, 1963; BANDEL, 1972; KREUTZER, 1992a: 270; SCHÖNLAUB et al., 2004: 19).

Biostratigraphy

Brachiopods. – *Karpinskya consuelo* (GORTANI, 1913).

Complementary references -

Remarks -



Views of the Lambertenghi Formation lithologies. a) rock surface consisting of pack- to grainstone with numerous algal-coated grains and larger bioclasts such as gastropods or stromatoporoids (photo T.J. SUTTNER); b) shallowing upward sequences of rimmed grainstones alternating with algal laminites (photo T.J. SUTTNER); c) oncolite limestone (photo E. KIDO); d) partially dolomitized stromatoporoid (photo T.J. SUTTNER).

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Autor(en)/Author(s): Pohler Susanne M.L., Bandel Klaus, Kido Erika, Pondrelli Monica, Schönlaub Hans-Peter, Simonetto Luca, Suttner Thomas

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