

CALOPLACA RUDERUM, A LICHEN SPECIES NEW TO POLAND

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Abstract. *Caloplaca ruderum* (Malbr.) Laundon, a lichen species not reported from Poland so far, was collected in Toruń city and environs (Lower Vistula region). The taxon occupies old walls of two medieval castles.

Key words: *Caloplaca ruderum*, lichens, distribution, Poland

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Caloplaca ruderum (Malbr.) Laundon [= *Lecanora aurantiaca* var. *ruderum* Malbr., *Placodium decipiens* var. *ruderum* Malbr., *Placodium ruderum* (Malbr.) H. Olivier, *Lecanora decipiens* var. *ruderum* (Malbr.) Hue, *Placodium decipiens* subvar. *decipiens* f. *ruderum* (Malbr.) Mereschk., *Placopsis decipiens* var. *camboricum* Larb., *Caloplaca incrustans* H. Olivier] has been known mainly from the western part of the North European Plain (Laundon 1992), and has not been reported from Poland previously (Fałtynowicz 2003). New localities of the species were found in NW Poland, in the Lower Vistula region (Fig. 1).

The collected specimens correspond in all details to the description given by Laundon (1976). The thalli are crustaceous, yellowish, white-pruinose (of hoary appearance) and forming thick, markedly convex, irregularly shaped, sometimes almost squamulose areoles without soredia (Fig. 2). The granule-like areoles are 0.3–1.0 mm in diam. Apothecia are present and up to 1.25 mm in diam., scattered to crowded, urceolate when young, becoming plane (never convex) with a tumid, crenulate and pruinose thalline margin surrounding the margin proper. The hymenium reacts J+ blue and is 120–130 μm high with small brownish crystals in the 12.5–25 μm wide epithecium. The paraphyses are 4–5 μm thick, simple and septate, with a swollen apical cell. The asci are clavate, 42–50 \times 11–12.5 μm , 8-spored. The ascospores are color-

less, ellipsoid, 15 \times 5 μm , and polarilocular with a 3–4 μm wide septum. Thallus and apothecia spot test reactions: C–, K+ crimson, P–.

According to Laundon (1976), *C. ruderum* is a calcicolous, photophilous and probably nitrophilous lichen. The species generally has been reported from limestone and mortar on well-lit, old and often medieval walls of churches (Laundon 1976; Wirth 1995). It is known from Germany (Poelt 1969; Wirth 1995, 2004), the British Isles (Laundon 1976; Laundon 1993; Coppins 2002),

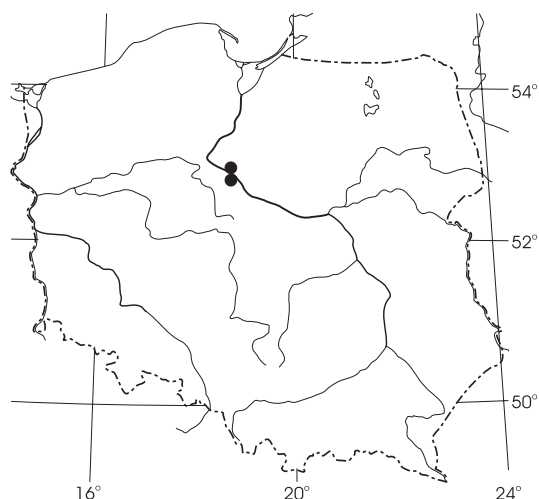


Fig. 1. Localities of *Caloplaca ruderum* (Malbr.) Laundon in Poland.

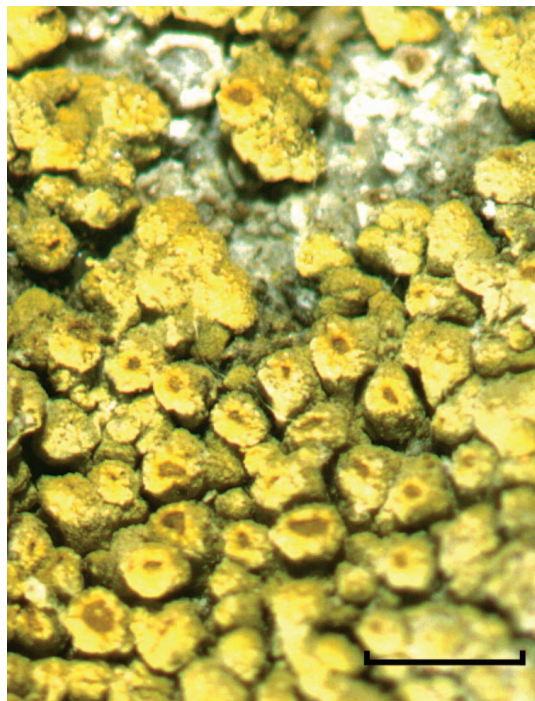


Fig. 2. *Caloplaca rudерum* (Malbr.) Laundon. Scale bar = 1 mm. Phot. A. Adamski.

France (Laundon 1976), Denmark (Aptroot 2000), the Iberian Peninsula (Llimona & Hladun 2001) and the Netherlands (Aptroot *et al.* 2004).

Caloplaca rudерum is probably widespread in Poland. The species is recognizable by its yellowish (never orange), pruinose thallus consisting of coarse, convex, irregular granule-like areoles, and tumid apothecial margin. It might be mistaken for other species of *Caloplaca*, especially *Caloplaca flavovirescens* (Wulfen) Dalla Torre & Sarnth., *C. saxicola* (Hoffm.) Nordin and *C. decipiens* (Arnold) Blomb. & Forssell. *Caloplaca flavovirescens* differs from *C. rudерum* in having an areolate but plane, dull greenish yellow, epruinose thallus, orange apothecial margins, and apothecia that become convex when old (Laundon 1976). *Caloplaca saxicola* and *C. decipiens* are distinguished by their marginal lobes of the thallus, which are never observed in *C. rudерum*.

SPECIMENS EXAMINED. LOWER VISTULA REGION: Toruń city, on left bank of Vistula River, below J. Piłsudski road bridge, Zamek Dybowski castle, ATPOL grid square Cd–30, 53°00'08"N/18°36'10"E, on mortar on well-lit SE wall of medieval castle ruins, associated with *Caloplaca citrina* (Hoffm.) Th. Fr., *C. saxicola*, *C. decipiens* and *Rinodina gennarii* Bagl., 15 Nov. 2004, *leg. E. Adamska* (TRN); Zamek Bierzgowski 15 km NW of Toruń city, ATPOL grid square Cc–29, 53°06'40"N/18°27'00"E, on mortar on old nutrient-enriched sunny wall of Teutonic Knights castle. 11 April 2004, *leg. M. Ceynowa-Gieldon* (TRN).

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