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## THE GENUS THELOCARPON NYL. IN THE CZECH REPUBLIC

Die Gattung Thelocarpon NYL. in der Tschechischen Republik

# Jana Horáková

Key words: *Thelocarpon*, Czech Republic, Bohemia, Moravia, distribution maps, ecology.

Schlagwörter: Flechten, Floristik, Ökologie, Thelocarpon, Tschechische Republik.

Summary: Of the 18 currently accepted species of the genus *Thelocarpon* NYL. in Europe 7 species are reported from the Czech Republic. *T. epibolum, T. intermediellum, T. olivaceum* and *T. superellum* are new for the Czech Republic. *T. lichenicola* was previously collected only once, now it is known from many new localities. *T. laureri* is found to be a common species. *T. impressellum* and *T. superellum* are known from only one locality. Distribution maps of all species known from the Czech Republic are attached.

Zusammenfassung: Aus der Tsechischen Republik sind 7 der 18 europäischen Arten der Gattung *Thelocarpon* NYL. bekannt. *T. epibolum, T. intermediellum, T. olivaceum* und *T. superellum* sind neu für die Tschechische Republik. *T. lichenicola,* eine in der Vergangenheit nur einmal gefundene Art, wurde in einigen neuen Lokalitäten entdekt. *T. laureri* ist eine weit verbreitete Art. *T. impressellum* und *T. superellum* kommen nur an einer Lokalität vor. Von allen Arten sind die Verbreitungskarten dargestellt.

#### Introduction

Species of the genus *Thelocarpon* are regarded as pioneer lichens occuring in localities showing humid microclimate. As shortliving organisms they are distributed even in polluted areas. Due to their minute size they are mostly overlooked. Majority of their localities have been discovered in the Czech Republic since 1989.

**Thelocarpon epibolum** NyL. var. *epibolum* (Map 1) Although two localities of *Thelocarpon epibolum* in the Czech Republic are situated in lowlands about 200 m above sea-level, its distribution here confirms also tendency to prefer submountain and higher elevations in this country. The species was found on a wide range of substrates including soil, rotten wood, plant debris, peat bog and old thalli of lichenes as *Baeomyces rufus* and *Peltigera* sp. It is known in 18 localities in the Czech Republic. No occurrence of *T. epibolum* var. *epithallinum* (LEIGHT. ex NYL.) G. SALISB. has been recorded by now.

### Thelocarpon impressellum Nyl. (Map 5)

The only known find from the Czech Republic is that collected by A. VĚZDA and revised by POELT & HAFELLNER (1975). Recently it has been also collected by the author of this paper in the Slovak Republic in situation with humid micro-habitat in West Tatra Mountains (see the below mentioned locality).

Locality in the Czech Republic:

Moravia merid., distr. BLANSKO, opp. Tišnov, in silvis prope pag. DEBLÍN, alt. 400 m s.m., 6664; leg. Vězda, (GZU).

#### Locality in the Slovak Republic:

Slovakia, Montes Západné Tatry, pag. ORAVICE, in valle Juráňova dolina, ad truncum putridum in confluvio rivi Juráňový potok, alt. 960 m s.m., 6784; 1.6.1990, leg. J. HORÁKOVÁ (PRM 887017).

### Thelocarpon intermediellum Nyl. (Map 2)

This species appears to be quite a common, but probably often overloo-ked. All of the 15 Czech and Moravian collections were made between 1994-1996. The most common substrate was found rotten wood of trunks or stumps of broad-leaved trees. The species was collected most frequently in association of *Micarea* species and *Saccomorpha icmalea*. As other substrates were recorded pine stump, peat, siliceus stone and pores of the basidiocarp of *Fomes fomenta*rius.

#### Thelocarpon laureri (FLOT.) NYL. (Map 3)

This is the most common species of the genus. Unlike the other species of the genus it occurs rather in open sunny situations. This phenomen is probably caused by the built algal seath in its ascomawall as adaptation towards 152

excessive exposition and dessication. Thelocarpon laureri grows on wide rank of substrates including wood of stumps and trunks, on bark, plant debris, pebbles, loose stones and it has been also found on worked timber and on man-made and influenced substrates as bricks or burnt wood. The species has been found in 39 localities in different areas of the Czech Republic by now.

#### Thelocarpon lichenicola (FUCKEL) POELT & HAFFELLNER (Map 4)

The species is known from 14 localities in mountain situations in the Czech Republic. However, it has been found in one locality at altitude of 330 m above sea-level in an inverse situation. Rotten wood, rocks, stones, peat, soil and undetermined species of the genus Polyporus were found as substrates of T. lichenicola.

#### Thelocarpon olivaceum B. de Lesd. (Map 5)

This sparsely distributed species in Europe was in autumn of 1996 discovered by Z. PALICE in the Czech Republic in sedimentation basin of power station on siliceous stone. According to SALISBURY (1966) and ALSTRUP & SØCHTING (1989) the species has been known by now from Austria, France, Germany, Great Britain, Switzerland and Denmark and is reported predominantly on stones, rocks and on old leather. One collection was made on brick.

#### Locality:

Bohemia orient., distr. PARDUBICE, pag. CHVALETICE, loco sedimentoso apud stationem vim electricam fabricanda, ad terram, ad saxum siliceum, alt. 220 m s.m., 5958; 18.10.1996, leg. Z. PALICE (hb. Z.P.).

*Thelocarpon superellum* NyL. (Map 5) This species is very rarely collected. The only known collection from the Czech Republic is that deposited in the herbarium of A. VĚZDA.

#### Locality:

Moravia septentr., montes Sudeti orient. (Jeseníky), inter pag. Skřítek et KLEPAČOV, ad terram humosam in fossis viae publicae, alt. ca. 800 m s.m., 5868; 3.10.1974, leg. A. Vězda (hb. Vězda).

#### Notes

Under conditions that only five pages are at disposal, the list of localities is included only for *T. impressellum*, *T. olivaceum* and *T. superellum*, the species

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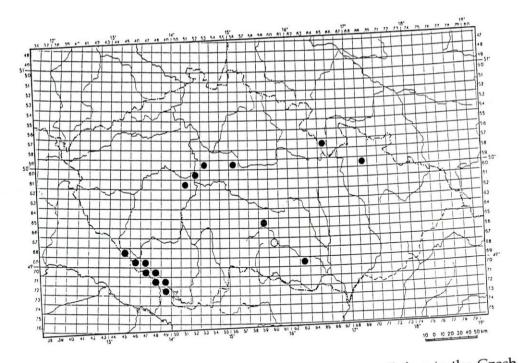
which were collected only once. The localities of the other species and microphotographs presented on poster in Salzburg 1996 as well as the next new results of investigation will be published later. Provided that several collections were made at the same locality, only the last record of the species is recorded in the coordinate squares. The fourdigit numbers before dates signify coordinate squares of 10 to 6 minutes (MTB grid). Symbols used in distribution maps:  $\bigcirc$  specimens collected before 1949,  $\bigcirc$  between 1950 -1974 and  $\bigcirc$  since 1975.

#### References

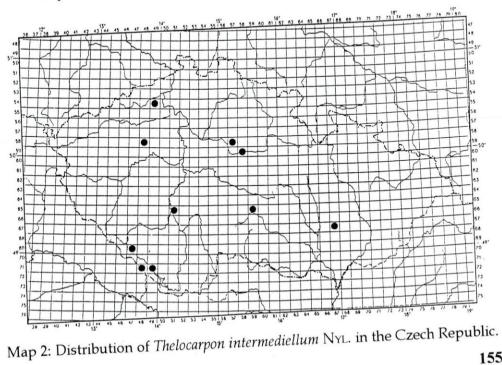
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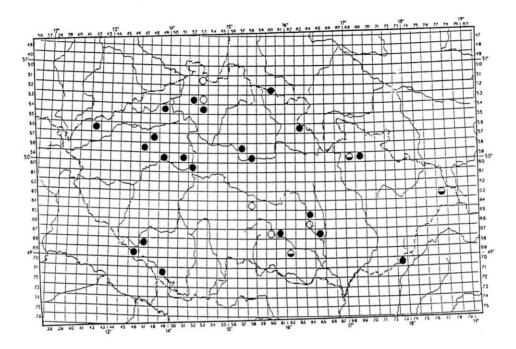
Jana Horáková National Museum, Mycological Department Václavské nám. 68 CZ-115 79 Praha 1 Czech Republic <u>Fax:</u> ++42- 2-242 26 488 <u>E-Mail:</u> ais@nm.anet.cz



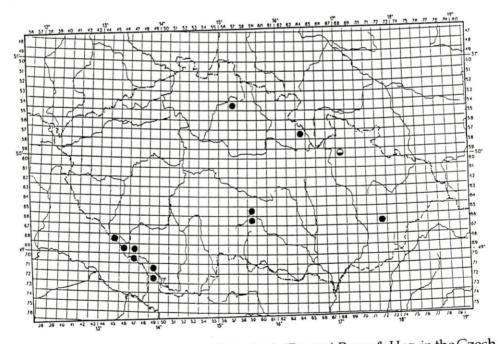
Map 1: Distribution of Thelocarpon epibolum NyL. var. epibolum in the Czech Republic.



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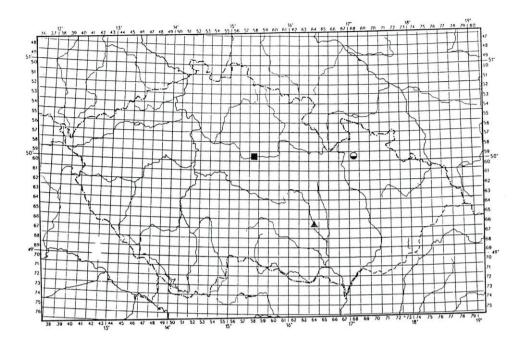


Map 3: Distribution of Thelocarpon laureri (FLOT.) NYL. in the Czech Republic.



Map 4: Distribution of *Thelocarpon lichenicola* (FUCKEL) POELT & HAF. in the Czech Republic.

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Map 5: Distribution of ▲*Thelocarpon impressellum* NyL., ■ *Thelocarpon olivaceum* B. DE LESD. and ⊖ *Thelocarpon superellum* NyL. in the Czech Republic.

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