

---

# MYCOTAXON

<http://dx.doi.org/10.5248/127.47>

Volume 127, pp. 47–49

January–March 2014

---

## A new rust on *Tragopogon* from Rhodes, Greece

HALVOR B. GJÆRUM<sup>1</sup> & KÅRE A. LYE<sup>2\*</sup>

<sup>1</sup>Norwegian Institute of Agricultural and Environmental Research, Plant Health and Plant Protection Division, previously Norwegian Plant Protection Institute (NPPI), NO-1430 Ås, Norway

<sup>2</sup>Norwegian University of Life Sciences, Department of Ecology and Natural Resource Management, Høgskolevegen 12, PO Box 5003, NO-1432 Ås, Norway

\*CORRESPONDENCE TO: [kare.lye@nmbu.no](mailto:kare.lye@nmbu.no)

**ABSTRACT** — *Puccinia rhodosensis* sp. nov. is described on *Tragopogon crocifolius* from Rhodes, Greece. It differs from all other rust species on *Tragopogon* in having teliospores with completely smooth walls. SEM photos are provided for telia and teliospores.

**KEY WORDS** — biodiversity, fungi, taxonomy, *Uredinales*

### Introduction

When scrutinizing an old collection of phanerogams from Rhodes on a *Tragopogon* specimen, we came across a *Puccinia* rust that did not correspond with any *Puccinia* species recorded on this host genus. We therefore publish it as a new species. SEM photos are provided for telia and teliospores.

### Taxonomy

*Puccinia rhodosensis* Gjørørum, sp. nov.

PLATES 1–2

MYCOBANK 805646

Differs from other *Puccinia* species on the genus *Tragopogon* by its smooth teliospores.

**TYPE:** Greece, Rhodes, Lindos, on roadside, 36°05' 35" N 28°05' 26" E, on leaves and stems of *Tragopogon crocifolius* L. (*Asteraceae*), 8 May 1990, K. A. Lye 15143 (**holotype**, NPPI; **isotype**, O).

**ETYMOLOGY:** from Latin *Rhodus* and Greek *Rhodos*; the adjective *rhodosensis* = from Rhodes

Pycnia, aecia and uredinia not seen. Telia on leaves and stems, singular or in small groups, surrounded by the ruptured epidermis, dark brown. Teliospores mostly ellipsoid, slightly constricted at septum, 15–21 × (13–)15–19 μm. Wall

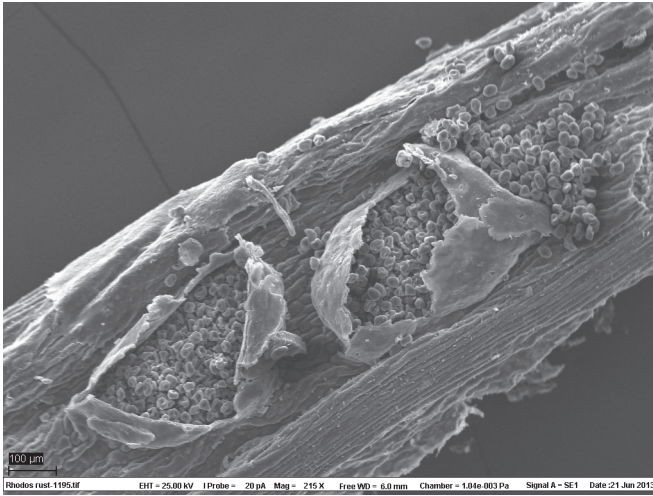


PLATE 1. *Puccinia rhodosensis* (holotype).  
Two telia filled with teliospores on stem of *Tragopogon crocifolius*.

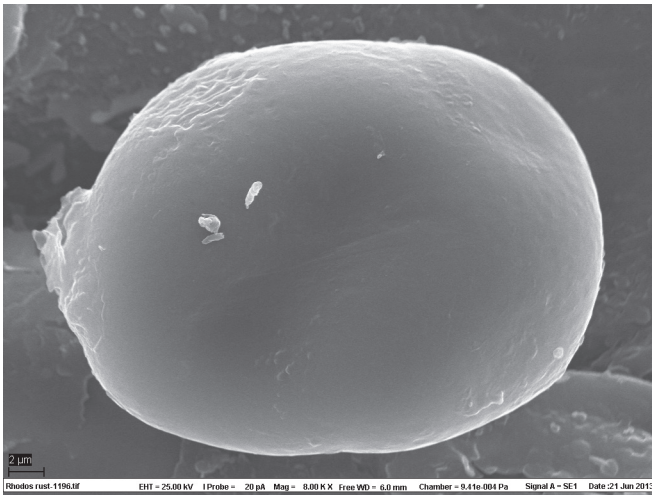


PLATE 2. *Puccinia rhodosensis* (holotype). Teliospore.

light brown, smooth, 1.5–2 μm thick, pores with low papillae, upper pore apical, lower pore depressed. Pedicel broken near the spore, hyaline. Parasitic on stems and leaves of *Tragopogon crocifolius* L.

NOTES: Two other *Puccinia* rusts on the genus *Tragopogon* — *P. hysterium* (F. Strauss) Röhl. (= *Puccinia tragopogonis* Corda) and *P. hysterium* subsp. *brachycyclica* (E. Fisch.) T. Majewski — differ from *P. rhodosensis* by their verrucose teliospores (Majewski 1979). Another *Puccinia* rust recorded on *Tragopogon*, *P. tranzscheliana* I. E. Brezhnev, differs by producing only aecidia on *Tragopogon*, with uredinia and telia on alternate *Carex* hosts (Brezhnev 1949).

#### **Acknowledgements**

We are indebted to Dr. Roger S. Peterson, Santa Fe, NM, USA and Prof. Halvor Solheim, Norwegian forest and landscape institute, Norway for critically reading the manuscript. The SEM photography was made possible through Elin Ørmen at the Department of Plant and Environmental Sciences, Microscopy Division, Norwegian University of Life Sciences.

#### **Literature cited**

- Brezhnev I. E. 1949. De nova uredinearum specie. Notul. syst. Sect. cryptog. Inst. bot. Acad. Sci. U.S.S.R. 6: 80–81.
- Majewski T. 1979. *Basidiomycetes, Uredinales* II. Flora Polska 11. Polska Akademia Nauk, Warszawa – Krakow.