

**A NEW RECORD OF *GEOPORA COOPERI* F.
COOPERI FROM WEST ASIA**

**MEHMET HALİL SOLAK, *FAHRETTİN GÜCİN, **MUSTAFA İŞILOĞLU
AND ***GIOVANNI PACIONI**

*Mugla Univ., Ula Ali Kocman Vocational School,
Program of Fungi, Muğla, Turkey.
E-mail: shalil@mu.edu.tr*

Abstract

Geopora cooperi Harkness f. *cooperi* Burdsall, a macrofungus belonging to the Ascomycetes collected during a field trip around İzmir and Manisa in 1996 is reported as a new record for west Asia, Turkey.

Geopora cooperi an ascomycete belonging to the family Otideaceae order Pezizales, is hypogeous and edible macrofungus (Anon., 1987). The only previous records are from North America and Europe (Burdsall, 1968; Moreno *et al.*, 1986; Montecchi & Dal Forno, 1995). This article presents the world distribution of one of the species of *Geopora* and expands its known area. It is a new record for the Turkish macrofungi.

Fruit bodies ascocarps 2-5 cm broad, globose to subglobose, hypogeous or rarely epigeous, outer surface irregularly furrowed, margin differentiated, opening to the exterior oriented randomly with respect to the soil surface, inconspicuous, the ascocarp covered by brown hairs giving the surface a fuzzy appearance, honey colored to dark brown; interior white to whitish, deeply convoluted, convolutions often contacting each other but remaining separate, outer surface following the interior of the convolution, giving each invagination; when viewed in section a thin line of brown pigmentation down the middle (Fig. 1a). Outer ectal excipulum a textura angularis, of cells up to 40 μ thick in outermost cells, yellow-brown, inner cells of this tissue hyaline and thin-walled, intergrading into the inner ectal excipulum (Fig. 1c). Excipular hairs abundant, superficial, up to 1 mm or more in length (most broken when collected), 8-14 μ broad, mostly thick-walled (1-4 μ thick) yellow-brown, others hyaline or thin-walled, flexuous, simple or branched, septate, sometimes encrusted with large granules over the entire surface, arising from surface cells of outer ectal excipulum, apex obtuse, basal cell often somewhat swollen except at the margin. Marginal hairs less flexuous (Fig. 1d). Inner ectal excipulum a texture intricata of thin-walled hyaline cells, 6-10 μ broad, intergrading on the outside into the outer ectal excipulum and on the inside into the subhymenium which is usually not well-defined (Fig. 1e). Ascospores broadly oval, elliptical, sometimes collapsing on one side and appearing reniform, hyaline, smooth, thin-walled, 20-27 x 13-17 μ . Asci cylindrical, tapering to the base to a crozier, 80-27 x 15-22 μ , operculate, usually 8 spored (Fig. 1b). Paraphyses hyaline, septate, thin-walled, 2-4 μ broad, sometimes swelling to 5-8 μ at apex, extending to the vicinity of the ascus apices. Habitat on soil under pines. Distribution between İzmir and Manisa, on soil under pine forests, 1 January 1996, S. 565.

* Biology, Sci. and Arts Fac., Fatih University İstanbul, Muğla Turkey

**Muğla Univ., Biology Dept., Sci. and Fac., Muğla, Turkey

***Dipartimento Di Scienze Ambientali, Universita 'Degli Studi Dell', Aquila, Italy

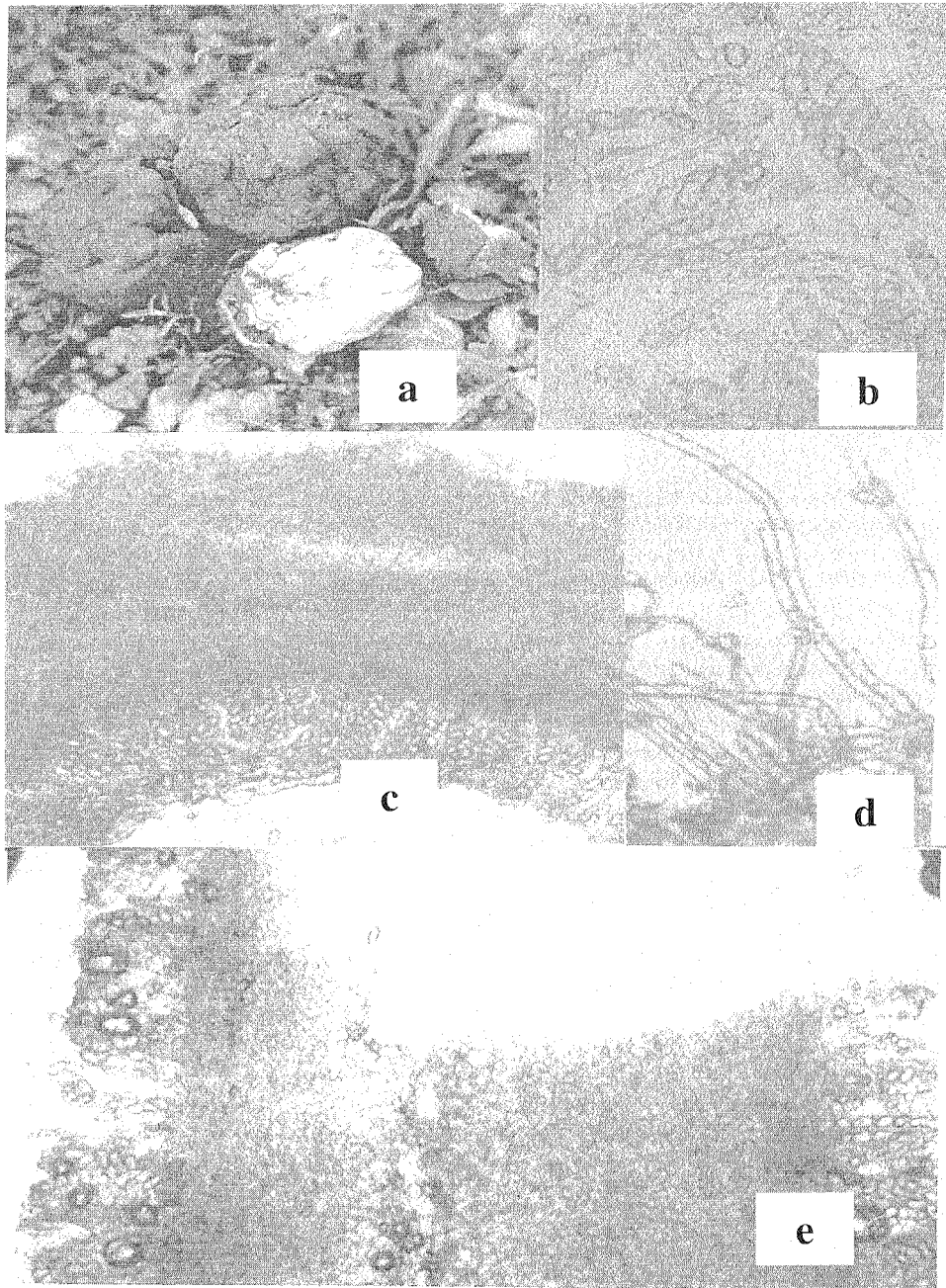


Fig. 1. *Geopora cooperi* f. *cooperi*

(a) Ascocarp (x1), (b) Asci, ascospores (x300), (c) Cross section showing the excipular tissue (outer ectal excipulum) (x150), (d) Excipular hairs (x300), (e) Cross section showing the inner ectal excipulum (x150)

Distribution of the species in the world until now

Alaska, California, Idaho, Washington, Colorado, Nevada, Utah, Wyoming, Austria, Germany, Spain, Italy.

References

- Anonymous. 1987. *The cookbook of North American truffles*. North American Truffling Society, Corvallis, Oregon.
- Burdsall, H.Jr. 1968. A revision of the genus *Hydnocystis* (Tuberales) and of the hypogeous species of *Geopora* (Pezizales). *Mycologia*, 60: 496-525.
- Montecchi, A. and A. Dal Forno. 1995. Prima segnalazione per Italia di *Geopora schackii* P. Hennings (= *Geopora cooperi* Harkness f. *cooperi*). *Rev. Mycol.*, 38: 33-38.
- Moreno, G., R. Galan and A. Ortega. 1986. Hypogeous fungi from continental Spain. *Mycologia*, 203-215.

(Received for publication 24 January 2002)