laevis margo, non-coalitus, salmoneus in medio et castaneus ad marginem fusco-brunnea. Pycnidia punctiformae, sub-globosa vel ampuliformae et irregularlis, immersa, ostiolata, magnit 130–290 μm diam; pycnidiosporae, bi-typus: (a) sporae simplicia, hyalina unicellularia, laevia, elliptica, 6.7–9.5 × 4 μm; (b) sporae hyalina, unicellularia, laevia, fulcata vel allantoidea, apicibus, subulate, 26.5–39.5 × 3.3 μm.

Pycnidia subglobose to irregular, ampulliform, immersed, later becoming erumpent; ostiole opening widely measure 130–290 μm diam., pycnidiospores two types: (a) spores simple, one-celled, hyaline, smooth, elliptical 6.7–9.5 × 4 μm; (b) spores hyaline, one-celled, falcate to allantoid with subulate ends, measure 26.5–39.5 × 3.3 μm.

On living leaves of *Dendrobium* sp. Leg. B.R.D.Y., July 1978, at Pune, AMH 4136 (holotype).

One of the authors (BRDY) is grateful to the Ministry of Education, Government of India, for financial support.

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CULTIVATION TRIALS OF *PLEUROTUS OPUNTIAE* (DUR. AND LEV.) SACC.

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SPECIES of *Pleurotus* are well-known edible mushrooms in different parts of the world. Unlike *Agaricus bisporus*, which is generally used fresh or canned, *Pleurotus* can be dried and stored for long periods without deterioration in culinary properties. In European countries and Japan *Pleurotus ostreatus* (Jacq. ex. Fr.) Kummer[1] and in Taiwan *P. cystidiosus* Miller[2] have been cultivated for a long time. Cultivation of various other species has also been reported in the literature[3–6]. The present paper reports cultivation of a wild species which was found growing on dead, decaying stumps of *Opuntia* sp. during the rainy season in 1984 in forests of Garhwal (Himalayas). This mushroom was obtained in pure culture by transferring tissue from the pileus on to yeastal PDA slants. The mycelium grew well between 25 and 28°C. Growth of the colony was fast and vigorous, and aerial growth of hyphae was also seen. The spawn was made by the usual method on wheat grains. The cultivation was carried out on rice straw substrate in polybags of size 75 × 45 cm holding 4 kg wetted straw (one kg dry). One hundred grams of grain spawn was mixed with the substrate prior to filling in the bags, which were perforated all over for ventilation. The mouths of the prepared bags were tied and the bags were placed on a shelf in a mushroom house maintained at 25–28°C. The substrate was completely colonized by the mycelium in 10–12 days. At this stage the polythene was torn off and removed completely, leaving a compact mass of mycelium-covered straw. Watering was done twice a day by gentle spray. Humidity of the growing room was kept at 80–90% and temperature at 20–25°C.

After 15–20 days of spawning fruit bodies started to appear and matured in another 2–3 days. Mushrooms continuously appeared at intervals; total yield after the cropping period of 25–30 days was 750 g net (in 1 kg dry rice straw). These mushrooms were graded as fair to good in culinary properties by qualified persons. Compared to *P. sajor-caju*, these mushrooms are more fleshy and tasty. Their snow white colour is an added advantage as this increases commercial acceptability. The description of the mushroom is given below.

Basidiocarp pleurotoid, imbricate, single or in clusters (figure 1). Pileus fleshy, 6–12 cm in diameter, depressed at the point of attachment to the stalk, colour white, paler towards margin, surface tomentose or glabrous, margin irregular, lobed and upcurved at maturity. Stipe eccentric, rarely central, 3–5.3 cm long and 4–9 mm across, cylindric, white, tomentose. Gills decurrent, white to cream-coloured, crowded, 2 mm broad, partial veil absent,

Figure 1. *Pleurotus opuntiae.*

context fleshy. Hymenium with thick-walled, irregularly arranged hyphae, inamyloid, clamp connections present, sub-hymenium with thin-walled hyphae. Spore print white creamy. Spores hyaline, cylindric, ellipsoid, non-amyloid, thin-walled, 8–11 × 3.5–4.7 μm, cystidia absent.

The above description completely matches with the description given by Pegler[7]. The fungus was identified as *P. opuntiae* (Dur. & Lev.) Sacc. and the culture was deposited in the Indian Type Culture Collection, Division of Mycology and Plant Pathology, IARI, New Delhi, under Accession No. ITCC 3311.

This note forms part of the Ph.D. thesis submitted by (DB) to the University of Garhwal.

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PHYLLODY OF *TEPHROSIA COCCINEA* WALL. (FABACEAE)

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TEPHROSIA COCCINEA is an undershrub distributed in western peninsular India[1,2]. It is rather rare in Marathwada region on the Deccan Plateau. Normal plants have 1–5-foliolate leaves with oblanceolate, emarginate leaflets that are glabrous and dark green on the adaxial surface and have densely appressed grey hairs abaxially. The flowers are pink and borne in leaf-opposed or terminal short racemes (figure 1a).

A peculiar individual of this species was collected in the Marathwada University Campus. In this plant the leaves were quite normal but all the flowers were replaced by clusters of bract-like outgrowths (figure 1b). All the whorls of floral appendages were transformed into green, ciliate bracts (figure 1c,d).

A review of the literature on plant diseases and teratomorphosis reveals that such abnormal and sterile specimens have been reported in a large number of cultivated as well as wild plants. The present specimen of *Tephrosia coccinea* is thus an addition to the list of abnormal specimens. A series of abnormalities progressing from a normal flower to completely vegetative branch has been termed antholysis[3]. This includes stages such as virescence (greening of floral parts), phyllody (development of floral parts into normal foliage), apostasis (the development of internodes theoretically present in the floral receptacles) and prolification (elongation of receptacle above the insertion of the pistil).

In the present case all the floral parts have been transformed into bract-like appendages. Abnormalities very similar to these have been particularly reported in *Crotalaria juncea* (Fabaceae)[4], *Sesamum indicum* (Pedaliaceae)[5], *Emilia sonchifolia* (Asteraceae)[6] and a few other plants. But the abnormal stages have been variously termed as phyllody[4,5] or invirescence[6].

At present nothing definite can be said about the abnormality in *T. coccinea* but it would be appropriate, on the basis of symptomology, to regard the present phenomenon as that of phyllody. In the various plant species mentioned above, the abnormal development of flowers has been reported to be due to infection by a virus or a mycoplasma-like organism. There is, however, a greater tendency to ascribe such plant abnormalities to the latter[7], especially after 1967.