

## **Resupinatus kavinii (Tricholomataceae), a fungus species newly noted in Poland**

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ABSTRACT: *Resupinatus kavinii* (Pil.) Mos. collected in the Pieniny National Park is noted as new to Poland. A detailed description of the species is provided.

KEY WORDS: *Resupinatus kavinii*, description, habitat, Pieniny National Park, West Carpathians, Poland

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The genus *Resupinatus* C. G. D. Nees ex S. F. Gray belongs to the family *Tricholomataceae*, subfamily *Resupinateae* (Watling & Gregory 1989). Eight species of this genus are known from Europe so far (Moser 1983), and nearly all of them have small fruit bodies not more than 2.5 cm in size. They all live saprotrophically on dead twigs, trunks or decaying remnants of wood.

Only five species and one form of the genus *Resupinatus* has been reported from Poland before. They are:

*R. applicatus* (Batsch: Fr.) S. F. Gray (from several localities in mountains and in the plains);

*R. applicatus* f. *rhacodium* (Batsch: Fr.) Pil. (only from Bieszczady Mountains);

*R. silvanus* (Sacc.) Sing. (only from the vicinity of Szczecin);

*R. trichotis* (Pers.) Sing. (only from Kraków and vicinity);

*R. unguicularis* (Fr.) Sing. (only from Świętokrzyski National Park);

*R. velinianus* (Domański) Moser (only from Bieszczady Mountains).

*Resupinatus kavinii* (Pil.) Mos. has not been reported from Poland. Only Dr. A. Drozdowicz (pers. comm.), while searching for *Myxomycetes* in the Pieniny Mountains in 1994, noticed some tiny sporophores growing among slime molds on decaying trunk. She picked and brought them to the Institute of Botany, Jagiellonian University, in Kra-

ków. In subsequent years (1996–1997) she found this fungus again in other parts of the park.

My analysis of the material indicated that it was an interesting and rare species: *Resupinatus kavinii* (Pil.) Mos. It is known from the following three stations in the Pieniny Mountains:

1) in the mean variant of *Fagetum carpaticum* with addition of spruce, near the tourist trail to Macelak (in 1994);

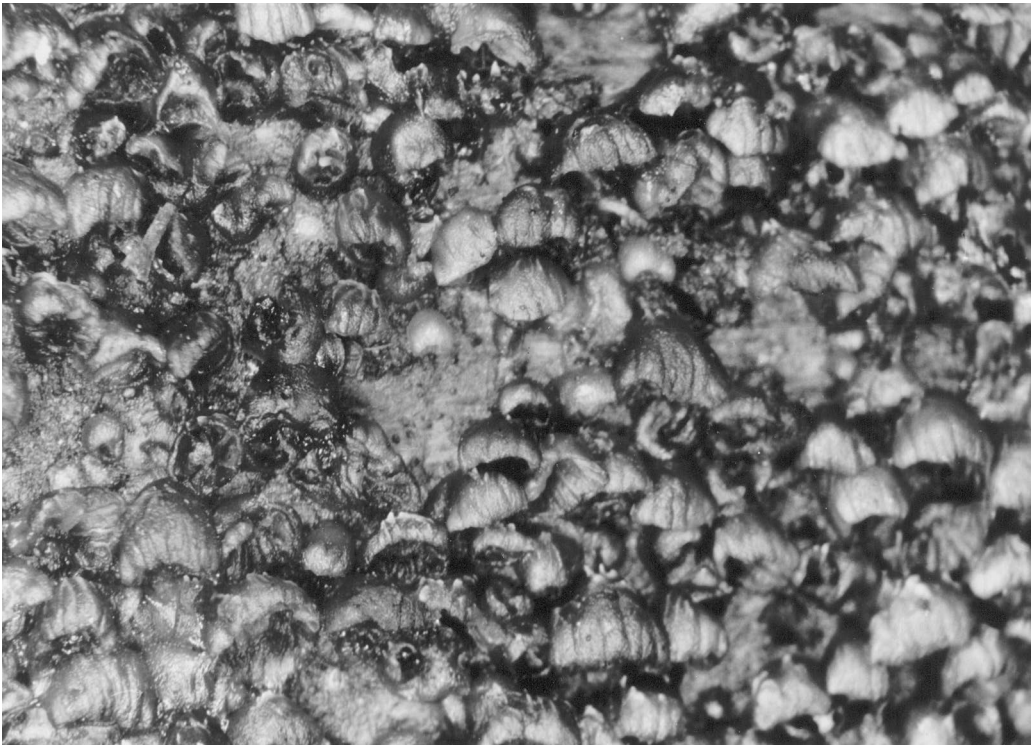
2) in the mean variant of *Fagetum carpaticum oxalidetosum*, coming downwards from Majerz to Harczy Grunt valley (in 1996);

3) in *Fagetum carpaticum* in the central part of Pieniński Potok valley (in 1996 and 1997).

### *Resupinatus kavinii* (Pil.) Mos.

Syn. *Pleurotus kavinii* Pilát (1930); *Pleurotus applicatus* (Batsch) Fr. f. *kavinii* Pil. (Pilát 1935); *Resupinatus kavinii* (Pil.) Mos. (Moser 1978, 1983).

*General data* – *Resupinatus kavinii* (Pil.) Mos. (under the name *Pleurotus kavinii* Pil.) was described by Pilát in 1930. The description was based on material originating from



**Fig. 1.** Dense concentration of fruit bodies of *Resupinatus kavinii* (Pil.) Mos. on the surface of dead wood in Pieniny National Park ( $\times 5$ ). Phot. K. Turnau.



**Fig. 2.** Single fruit bodies of *Resupinatus kavinii* (Pil.) Mos. from the Pieniny National Park ( $\times 15$ ). A few distant lamellae are visible. Phot. K. Turnau.

Subcarpathian Russia. Five years later the same author recognized this species as a form of *Pleurotus applicatus*: *P. applicatus* (Batsch) Fr. f. *kavinii* Pil. (Pilát 1935). Then this taxon was transferred to the genus *Resupinatus* by Moser (1978, 1983). Because of the rarity of this species, the true distribution of it in Europe is unknown. Probably it is widespread, but it can be very easily overlooked because of its dark color and very small size. Besides Subcarpathian Russia (Pilát 1930) it is recorded from two localities in Britain: Surrey and Warwickshire (Watling & Gregory 1989). Malençon and Bertault (1975) reported this species from North Africa (Morocco).

*Description based on material from the Pieniny National Park* – Fruit-bodies very small 1.5–2(3) mm in size, growing gregariously in troops on the surface of dead wood (Fig. 1). Fructifications bell-shaped or cyphelloid, with surface slightly striate and margin often incurved to inside. Surface nearly glabrous, grey with brown tints when moist, darkening on drying, finely black, with dorsal attachment, without stipe (Fig. 2). Flesh distinctly gelatinized, color same as surface of pileus. Lamellae visible only under magnifying glass, a little paler than the cap, gelatinized, distant, few in number, usually less than ten. Spores non-amyloid, broadly ellipsoid, smooth, hyaline,  $4.5\text{--}5 \times 3.5 \mu\text{m}$ . Cystidia and clamp-connections absent.

In the publications of some authors there is disagreement on spore size in *Resupinatus kavinii*. These divergences are as follows:

Source	Spore size
Pilát (1930, 1935)	4.5 × 3.5 μm
Moser (1978, 1983)	6.0–6.5 × 4.5–5.5 μm
Malençon & Bertault (1975)	5.6–5.8 × 4.4–4.7 μm
Watling & Gregory (1989)	6.0–6.5 × 4.5–5.5 μm
Pieniny National Park	4.5–5.0 × 3.5 μm

The collections from the Pieniny Mountains are nearest to those given by Pilát in 1930 in regard to spore size and the shape of sporocarps.

*Resupinatus kavinii* resembles the closely related *R. applicatus* (Batsch: Fr.) S. F. Gray and *R. trichotis* (Pers.) Sing. = *R. rhacodium* (Bk. & Curt.) Sing., but these two species differ in their larger fruit bodies: to 1 cm. Moreover, *R. trichotis* differs in its cap, which is not glabrous but covered with dark brown to black shaggy hairs.

Dry specimens of *Resupinatus kavinii* are deposited in the Herbarium of the Institute of Botany of the Jagiellonian University, Kraków (KRA).

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