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Contributions to the Bryoflora of Greece, I. The Bryophytes of the Cave Perama near Joannina

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ABSTRACT: This paper deals with the Bryophytes collected by the author in 1976 in Cave Perama (Epirus, near Joannina), and at its upper entrance. 7 Musci are reported from the cave and 2 Hepatics and 14 Musci from its upper entrance.

In July of 1976 spending my summer holidays in Greece I had the opportunity to make a little Bryophyte collection at several places. On the 13th of July I visited the Perama Cave where I collected Bryophytes in the cave, near the electric lamps and from the upper entrance.

The cave is situated in the province Epirus in the hill Goritsa at a distance of 4 km from Joannina at an altitude of 486 m above sea level. It was discovered in 1951 by J. Petrochilos, then explored and illuminated and in 1957 it was opened to the public (PETROCHILOS 1968). Its upper entrance is a shaft with a length of about 10 m till a frosted-glass door and a slope of about 45^{o} facing NW.

Mosses of the family Pottiaceae are the most characteristic of the bryophytic flora of the cave. More than 50% of the species is pottiaceous making up about 90% of the total amount of the Bryophytes. Of the flora of the electric lamps the moss Eucladium verticillatum was the most characteristic with the Fissidens bryoides var. bryoides. No liverwort was found inside the cave and in the very external region of the shaft. In some places I have found some - until now - indeterminable pleurocarpous mosses which were totally encrusted with Lichenes and Algae. The specimens are deposited in BP (Herbarium of the Hungarian Natural-History Museum).

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HEPATICAE

Lunularia cruciata (L.) DUM. From -1 m to the door in several places at the foot of the walls.

Reboulia hemisphaerica (L.) RADDI. At about -0.5 m, on the wall facing N.

MUSCI

Bryum sp. In a very little amount inside the cave and at about -5 m on the wall facing N.

Eucladium verticillatum (BRID.) B.S.G. At lots of places in the cave and in the shaft from -2 m on the walls and on the ceiling. The most common species of the cave.

Fissidens bambergeri SCHIMP. From -3 m till the door on the walls.

Fissidens bryoides HEDW. var. bryoides. In the cave at lots of places in rather big amounts. It is the second species inside the cave. I have not found it in the shaft.

Fissidens minutulus SULL. Inside the cave (very few).

Fissidens minutulus SULL. ssp. pusillus (WILS.) WIJK et MARG. At about -3 m at the foot of the wall facing N.

Grimmia sp. At the beginning of the shaft, on the outer wall.

Gymnostomum aeruginosum SM. At -5 m on the wall facing N.

Orthotrichum cupulatum BRID. At the beginning of the shaft, on the outer wall.

Pleurochaete squarrosa(BRID.) LINDB. At the beginning of the shaft, on the outer wall.

Timmiella anomala (B.S.G.) LIMPR. From the beginning of the shaft till the door and inside the cave, too. In the latter place very few.

Timmiella barbuloides (BRID.) MOENK. Like the latter species, usually together.

Timmiella cf. flexiseta (BRUCH) LIMPR. At about -5 m on the wall facing N.

Tortella flavovirens (BRUCH) BROTH. At the beginning of the shaft, on the outer wall.

Tortella inflexa (BRUCH) BROTH. At the beginning of the shaft, on the outer wall.

Tortella nitida (LINDB.) BROTH. At the beginning of the shaft, on the outer wall and at -6 m on the wall facing S.

Tortula muralis HEDW. At the beginning of the shaft, on the outer wall and a few threads inside the cave.

Tortula princeps DE NOT. At the beginning of the shaft, on the outer wall.

REFERENCES

DIXON, H.N. - JAMESON, H.G. (1924): The Student's Handbook of British Mosses. London, pp. 582.

GROLLE, R. (1976): Verzeichnis der Lebermoose Europas und benachbarter Gebiete. - Feddes Repert. 87: 171-279.

HARARAS, K.G. (1976): Research on the Bryophytes of the Island of Corfu (Ionean Islands). - Athens, pp. 160.

HUSNOT, T. (1884-1890): Muscologica Gallica. - Paris, pp. 458.

MÖNKEMEYER, W. (1927): Die Laubmoose Europas. - In L. RABENHORST: Kryptogamen-flora, Band 4, Erganz. Leipzig, pp. 956.

MÜLLER, K. (1906-1916): Die Lebermoose Deutschland, Österreich und der Schweiz. - In L. RABENHORST: Kryptogamen-flora, ed. 2, Band 6 (Abth. I-II). Leipzig, pp. 1736.

PETROCHILOS, A. (1968): La grotte du village "Perama" de Jannina. - Bull. Soc. Spéléol. Grece 9 (5-8): 151-152.

SMITH, A.J.E. (1976): Key to British and Irish Species of Fissidentaceae. - Brit. Bryol. Soc. Bull. 1976 (26): 26-27.

SACICZ-LJUBITZKAJA, L.I. - SMIRNOVA, Z.N. (1970): Opredelitel' listostebel'nüh mkhov SSSR. Verhoplodnüje mkhi. - Leningrad, pp. 824.

WIJK, R. VAN DER, MARGADANT, W.D. et FLORSCHÜTZ, P.A. (1959-1969): Index Muscorum. Vol. I-V. - Utrecht, pp. 3138.

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