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A Preliminary Checklist of Arkansas Acrasieae

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A study of the distribution of the Acrasiomycota in Arkansas was conducted which included identification and culturing. The Acrasiomycota species were collected from soil, dung, and leafmold during January 1976. Sampling sites included a mesic forest type predominated by white oak (*Quercus alba*) and mockernut hickory (*Carya tomentosa*) in Van Buren County (T9N R12W NW NW27) and a dry forest type characterized by shortleaf pine (*Pinus echinata*), black hickory (*Carya texana*), and white oak in Pulaski County (T1N R12W center 32). Isolation of the Acrasieae was accomplished by the methods established by Raper and Cavender (1965a).

Nine species of cellular slime molds were recovered from Arkansas soils. Five of these Acrasieae are reported to be universal in habitat, *Dictyostelium mucoroides*, *D. purpureum*, *D. polycephalum*, *Polysphondylium pallidum*, and *P. violaceum* inhabiting tropical, temperate, and Asian forests (Cavender 1976, Bonner 1967). The other four species isolated, *Guttulinopsis*, *D. minutum*, *D. lacteum*, and *Acrasis*, may have a restricted range.

In their study of Acrasieae distribution in the eastern forests of North America, Raper and Cavender (1965b) sampled the soil of the oak-hickory forest at Rich Mountain Gap, Arkansas. Of the nine species recovered in the present study, *D. polycephalum*, *Acrasis*, and *Guttulinopsis* were undetected by Raper and Cavender in Arkansas.

LITERATURE CITED

- BONNER, J.T. 1967. *The cellular slime molds*, 2nd ed. Princeton University Press, Princeton, New Jersey. 205 pp.
- CAVENDER, JAMES C. 1976. Cellular slime molds of Southeast Asia. I. Description of new species. *Amer. J. Bot.* 63(1):60-70.
- RAPER, K.B. and J.C. CAVENDER. 1965a. The Acrasieae in nature. I. Isolation. *Amer. J. Bot.* 52(3):294-296.
- RAPER, K.B. and J.C. CAVENDER. 1965b. The Acrasieae in nature. III. Occurrence and distribution in forests of Eastern North America. *Amer. J. Bot.* 52(3):302-308.

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