

A Preliminary List of the Plasmodial Slime Molds (Myxomycota) of New Jersey

compiled 2008-2009, Kerry Barringer

The plasmodial slime molds are fascinating creatures, neither plant nor animal, and now thought to be unrelated to the fungi, where they have been placed in the past.

The species of plasmodial slime molds tend to be cosmopolitan, so most species known to occur in deciduous and mixed-deciduous temperate forests should occur in the state. Good collectors, especially J. B. Ellis in the late 1800's and Ruth Allen in the 1960's, found many species, but there are undoubtedly more to be discovered. Most collectors studied areas near their homes: Ellis collected around Newfield near the southern corner of Gloucester County and Allen collected around Cinnaminson in northwestern Burlington County. Because of this, we know little about the distribution of species through the state, but the diversity of species, found even in these very limited areas suggests that careful study will bring rich results.

Though they are small, the fruiting bodies of the plasmodial slime molds are often beautiful and always interesting. They have been used in experimental studies of development, but we know very little about their role in the soil. Many species can be grown, either in moist chambers or terraria, so that detailed observations are possible.

Checklist

Amaurochaete (Amaurochaetaceae)

Amaurochaete atra (Alb & Schwein.) Rostafinski.

Gloucester : J. B. Ellis s.n. (BPI)

Amaurochaete fuliginosa (Sowerby) T. Macbride.

Gloucester: J. B. Ellis s.n., 1874 (BPI)

Arcyria (Arcyriaceae)

Arcyria cineria (Bull.) Persoon - grey arcyria

Bergen: Barringer 21259 (BKL)

Gloucester

Morris: Barringer 21643 (BKL)

Arcyria denudata (L.) Wettstein

Gloucester

Morris: Barringer 21640 (BKL)

Arcyria ferruginea Saut.

Burlington: R. Allen 996 (BPI)

Arcyria incarnata (Persoon) Persoon - rose arcyria

Burlington: R. M. Allen c-2018 (BPI)

Gloucester

Arcyria insignis Kahlbr. & Cooke

Ocean: G. W. Martin s.n., 1928 (BPI)

Arcyria magna Rex

Burlington: R. Allen 2060 (BPI)

Arcyria nutans (Bull.) Grev. - golden arcyria

Burlington: s.l. s.n., s.d. (BPI)

Arcyria obvelata (Oeder) Onsberg

Gloucester

Arcyria pomiformis (Leers) Rostaf.

Burlington: R. M. Allen s.n., Jul 1982 (BPI)

Gloucester

Badhamia (Physaraceae)

Badhamia capsulifera (Bull.) Berk.

Gloucester:

Badhamia nitens Berk.

Gloucester

Badhamia utricularis (Bull.) Berk.

Hudson:

Calonema (Trichiaceae)

Calonema aureum Morgan

Middlesex: C. M. Haenseler, s.n., Oct 1927 (BPI)

Ceratiomyxa (Ceratiomyxaceae)

Ceratiomyxa fruticulosa (Mull.) Mac. - coral slime

Bergen: *Barringer 21258* (BKL)

Morris: *Barringer 21641* (BKL)

Passaic: *Barringer 21267* (BKL)

Sussex: *Barringer 21587* (BKL)

Warren: *Barringer 21246* (BKL)

Clastoderma (Clastodermataceae)

Clastoderma debaryanum A. Blytt

Burlington: *R. Allen C-1810b* (BPI)

Comatricha (Stemonitaceae)

Comatricha aequalis Peck

Gloucester: *J. Ellis s.n.* (BPI)

Comatricha ellisii Morgan

Gloucester: *J. Ellis s.n.* (BPI)

Comatricha irregularis Rex

Middlesex: *C. M. Haenseler 125* (BPI)

Comatricha laxa Rostaf.

Burlington: *R. Allen & R. McVaugh 2536* (BPI)

Gloucester

Hudson

Comatricha longa Peck

Burlington: *R. Allen C-1956* (BPI)

Comatricha lurida Lister

Burlington: *R. Allen C-1666* (BPI)

Comatricha nigra (Pers.) J. Schn.

Burlington: *R. Allen H524* (BPI)

Comatricha pulchella (C. Bab.) Rostaf.

Burlington: *R. Allen 2714* (BPI)

Comatricha reticulata H. C. Gilbert

Burlington: *R. Allen C-1988* (BPI)

Comatricha stemonitis (Scopoli) Wettstein

Bergen: *L. Underwood s.n.*, Jul 1899 (BPI)

Comatricha typhoides (Bull.) Rostaf.

Burlington: *R. M. Allen C-2994* (BPI)

Craterium (Physaraceae)

Craterium leucocephalum (Pers.) Ditmar

Burlington: *R. Allen s.n.*, 1962 (BPI)

Gloucester:

Craterium nigra (Pers.) J. Schrodt

Gloucester

Hudson

Craterium obovatum Peck
Camden: *J. Dearness & E. Davis 694* (BPI)
Craterium pulchella (C. Bob.) Rostaf.
Hudson

Cribraria (Cribrariaceae)

Cribraria aurantiaca Schrader
Gloucester
Cribraria cancellata (Batsch) Nann.-Brem.
Burlington: *Barringer 21146* (BKL)
Gloucester: *Cooke 399* (BPI)
Middlesex: *C. M. Haenseler 118* (BPI)
Cribraria intricata Schrader
Burlington: *R. Allen C-636*
Gloucester
Cribraria tenella Schrader
Burlington: *R. McVaugh s.n.* (BPI)

Diachea (Spumariaceae)

Diachea leucopodia (Bull.) Rostaf.
Gloucester: *J. B. Ellis s.n.*, 1893 (BPI)

Dictydiaethalium (Clathroptychiaceae)

Dictydiaethalium plumbeum (Schumacher) Rostaf.
Gloucester: *J. B. Ellis s.n.*, 1893 (BPI, NY)
Hudson
Middlesex: *C. M. Haenseler 118* (BPI)

Dictydium (Cribrariaceae)

Dictydium cancellatum (Batsch) T. Macbr. – Chinese lantern
Burlington: *Barringer 21146* (BKL)

Diderma (Didymiaceae)

Diderma cinereum Morgan
Gloucester
Diderma cingulatum Nann.-Brem.
Gloucester
Diderma effusum (Schwein) Morgan
Burlington: *R. Allen s.n.*, 1965 (BPI)
Diderma simplex (J. Schr.) G. Lister
Hunterdon: *C. L. Schaer 921* (BPI)
Diderma spumarioides (Fries) Fries
Sussex: *Hagelstein & Rispaud s.n.*, s.d. (NY)

Didymium (Didymiaceae)

Didymium iridis (Ditmar) Fr.
Morris: *Barringer 21644* (BKL)
Didymium nigripes (Link) Fr.
Gloucester
Didymium squamulosum (Alb. & Schwein.) Fr.
Burlington: *R. Allen C-1636* (BPI)
Gloucester
Hudson
Middlesex: *C. M. Haenseler 93* (BPI)

Enteridium (Reticulariaceae)

Enteridium intermedium (Nann.-Brem.) M. L. Farr

Burlington: *R. Allen s.n.* (BPI)

Enteridium olivaceum Ehrenb.

Burlington: *J. Anderson s.n.*, 1956 (BPI)

Enertenema (Amaurochaetaceae)

Enertenema berkleyana Rostaf.

Gloucester

Fuligo (Physaraceae)

Fuligo cinerea (Schwein.) Morgan

Burlington: *R. Allen 2452* (BPI)

Fuligo septica (L.) F. H. Wigg. - dog vomit slime mold

Burlington: *R. Allen 2530* (BPI)

Gloucester: *J. B. Ellis s.n.*, s.d. (NY)

Passaic: *Barringer 21610* (BKL)

Union: *G. A. Reichling 55* (BPI)

Hemitrichia (Arcyriaceae)

Hemitrichia calyculata (Speg.) M. L. Farr

Burlington: *R. Allen 1478* (BPI)

Hemitrichia clavata (Pers.) Rostaf.

Gloucester: *J. B. Ellis s.n.*, 1883 (BPI, NY)

Middlesex: *C. M. Haenseler 3* (BPI)

Morris: *Grout 447* (BPI)

Hemitrichia serpula (Scopoli) Rostaf. - pretzel slime mold

Gloucester

Hemitrichia stipata (Masse) T. Macbr.

Burlington: *R. Allen C-1760* (BPI)

Sussex: *Barringer & Zielinski 21374* (BKL)

Lamproderma (Stemonitidaceae)

Lamproderma arcyrionema (Sommerf.) Rostaf.

Gloucester: *J. B. Ellis s.n.*, s.d. (NY)

Hudson

Lamproderma arcyrionema Rostaf.

Burlington: *R. Allen 2630a* (BPI)

Lamproderma columinum (Pers.) Rostaf.

Gloucester: *J. B. Ellis s.n.*, s.d. (NY)

Hudson

Lamproderma ellisianum Cooke

Gloucester: *J. B. Ellis s.n.* (BPI)

Lamproderma violaceum Fr.

Gloucester: *J. B. Ellis s.n.* (BPI)

Leocarpus (Physaraceae)

Leocarpus fragilis (Dicks.) Rostaf.

Passaic: *Barringer 21607* (BKL)

Union: *G. Meschutt s.n.* (NY)

Licea (Liceaceae)

Licea castanea G. Lister

Gloucester: *J. B. Ellis s.n.* (BPI)

Licea succulenticola Mosquera, Estado-Torres & Beltran

Burlington: *R. Allen H529* (BPI)

Lindbladia (Liceaceae)

Lindbladia tubulina Fr.
Gloucester

Lycogala (Acyriaceae)

Lycogala epidendrum (L.) Fr. - wolf's milk
Burlington: *R. Allen C-838* (BPI)
Gloucester: *J. B. Ellis s.n.* (BPI)
Middlesex: *C. M. Haenseler s.n.* (BPI)
Lycogala exiguum Morgan
Burlington: *R. Allen C-704* (BPI)

Metatrachia (Arcyriaceae)

Metatrachia vesparia (Batsch) Nann.-Brem.- wasp's nest slime mold
Burlington: *R. Allen C-1926* (BPI)
Gloucester

Mucilago (Spumariaceae)

Mucilago crustacea F. H. Wigg.
Gloucester

Perichaena (Perichaenaceae)

Perichaena corticalis (Batsch) Rostaf.
Gloucester
Perichaena depressa Llb.
Gloucester
Perichaena vermicularis (Schwein.) Rostaf.

Physarum (Physaraceae)

Physarum album (Bull.) Cheval
Gloucester
Physarum bivalve Pers.
Gloucester:
Hudson:
Physarum cinereum (Batsch) Pers.
Burlington: *R. Allen 36* (BPI)
Gloucester:
Hudson:
Middlesex: *C. M. Haenseler 92* (BPI)
Physarum citrinum Schumacher
Gloucester:
Hudson:
Physarum didermoides (Pers.) Rostaf.
Gloucester: *J. B. Ellis s.n.* (BPI)
Middlesex: *C. M. Haenseler 116* (BPI)
Physarum digitatum G. Lister and Farquarson
Middlesex: *C. M. Haenseler 140* (BPI)
Physarum flavicomum Berk.
Burlington: *R. Allen 1906* (BPI)
Gloucester: *J. B. Ellis s.n.*, s.d. (NY)
Physarum galbeum
Passaic: *Barringer 21608* (BKL)
Physarum globuliferum (Bull.) Pers.
Burlington: *R. Allen 1716* (BPI)
Physarum gyrosum Rostaf.
Middlesex: *C. M. Haenseler s.n.* (BPI)

Physarum leucophaeum Fr.
Gloucester
Hudson
Physarum murinum Lister
Burlington: *R. Allen* 2632 (BPI)
Physarum nucleatum Rex
Burlington: *R. Allen* C-1176 (BPI)
Physarum nutans Pers.
Middlesex: *C. M. Haenseler* 122 (BPI)
Physarum polycephalum Schwein.
Burlington: *R. Allen* C-382 (BPI)
Gloucester: *J. B. Ellis* s.n. (BPI)
Middlesex: *C. M. Haenseler* 28 (BPI)
Physarum roseum Berk. & Broome
Burlington: *R. Allen* 2938 (BPI)
Physarum straminipes Lister
Burlington: *R. Allen* 3334 (BPI)
Physarum viride (Bull.) Pers.
Gloucester

Reticularia (Reticulariaceae)

Reticularia lycoperdon Bull.
Burlington: *L. Underwood* s.n. (BPI)
Reticularia splendens Morgan
Middlesex: *C. M. Haenseler* 80 (BPI)
Reticularia olivacea (Ehrenb) Fr.
Gloucester

Stemonitis (Stemonitaceae)

Stemonitis axifera (Bull.) T. Macbr.
Gloucester
Passaic: *Barringer* 21609 (BKL)
Sussex: *Barringer & Zielinski* 21373 (BKL)
Stemonitis fusca Roth.
Burlington: *Barringer* 21145 (BKL)
Gloucester
Middlesex: *C. M. Haenseler* 70 (BPI)
Morris: *Barringer* 21642 (BKL)
Sussex: *Barringer* 21128 (BKL)
Warren: *Barringer* 21245 (BKL)
Stemonitis trechispora (Berk.) T. Macbride
Burlington: *R. Allen* 2992 (BPI)
Stemonitis virginensis Rex
Burlington: *R. Allen* 3114 (BPI)
Stemonitis webberi Rex
[not designated]: *G. G. Nearing* s.n. (BPI)

Stemonitopsis (Stemonitaceae)

Stemonitopsis typhina (F. H. Wigg.) Nann.-Brem.

Symphytocarpus (Stemonitaceae)

Symphytocarpus confluens (Cooke & Ellis) Ing & Nann.-Brem.

Trichia (Trichiaceae)

Trichia botrytus (J. F. Gmelin) Pers.
Gloucester

Trichia contorta (Ditmar) Rostaf.

Gloucester: *J. B. Ellis s.n.* (BPI)

Trichia decipiens (Pers.) T. Macbr.

Gloucester

Middlesex: *C. M. Haenseler 56* (BPI)

Trichia favoginea (Batsch) Pers.

Burlington: *R. Allen 590* (BPI)

Gloucester: *J. B. Ellis s.n.* (BPI)

Trichia scabra Rostaf.

Gloucester

Middlesex: *C. M. Haenseler 22* (BPI)

Trichia varia (Pers.) Pers.

Gloucester

Tubulifera (Liceaceae)

Tubifera arachnoides Jacquin

Gloucester

Hudson

Tubifera casparyi Rostaf.

Gloucester

Tubifera ferruginosa (Batsch) J. F. Gmelin - raspberry slime

Burlington: *R. Allen 1778* (BPI)

Middlesex: *C. M. Haenseler 16* (BPI)

Tubifera microsperma (Berk. and M. A. Curtis) G. W. Martin

Burlington: *R. Allen 960* (BPI)