A Preliminary List of Bryophytes of Linn County, Iowa

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A PRELIMINARY LIST OF BRYOPHYTES OF LINN COUNTY, IOWA*

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In the rather extensive literature on Iowa bryophytes little mention is made of Linn county. Published records, however, do not represent all collecting for Dr. H. S. Conard of Grinnell College has collected fifty species and one variety of mosses and fifteen species of liverworts. Of the above number nine species of mosses and seven species of liverworts have not been collected by the author. This paper is an attempt to bring together under one title the names of bryophytes collected in Linn county.

Considerable collecting has been done by Dr. L. R. Wilson of Coe College and several fine records (Bruchia Sullivanti and Lepidozia reptans) are due to his activity. Rather extensive collections have been made by the author either alone or in company of members of a class in bryophytes. Some of this material, especially the Brachytheciums and Leskeas, has not been identified with certainty and is not included in this report.

The total known bryophyte flora of Linn county consists of ninety one species and five varieties of mosses and eighteen species of liverworts. In addition there is one species of moss from the literature which is of doubtful validity. One species of moss is not represented in the collections of either Dr. Conard or the author. Nomenclature follows that of Andrews (1940, b), Evans (1940),

The author wishes to thank Dr. H. S. Conard for permission to use his list of Linn county collections and for many other favors too numerous to enumerate. Miss Irma Schnooberger, a student of Dr. W. C. Steere of the University of Michigan, kindly identified the Sphagna.

MUSCI
Sphagnaceae

Sphagnum magellanicum Brid.
Known from but one station in a seepage area on Lindley Fine Sand two miles northwest of Cedar Rapids. Identification confirmed by Miss Schnooberger.

Sphagnum capillaceum (Weiss) Schrank.
Growing near the above but on drier soil. Identified by Miss Schnooberger.

* Contributions from the Science Laboratories of Coe College N. S. No. 5.

197
Polytrichaceae

*Atrichum angustatum* (Brid.) Bry. Eur.
Common on soil in more xeric places than *A. undulatum*.

*Atrichum crispum* (James) Sull.
From prairie bog three miles south of Coggon. Communicated by Dr. H. S. Conard.

*Atrichum Macmillani* (Holz.) Frye
On sandy soil in woods northwest of Cedar Rapids.

*Atrichum undulatum* (Hedw.)
Common on soil in moist woods. Also collected by Dr. Conard.

*Polytrichum commune* Hedw.
Rather frequent on ground in woods. It is especially common in sandy soil areas.

*Polytrichum juniperinum* Hedw.
Common, especially on sandy soil.

*Polytrichum ohioense* Ren. & Card.
Not common. Also collected by Dr. Conard.

Fissidentaceae

*Fissidens cristatus* Wils.
Not common.

*Fissidens minutulus* Sull.
Frequent on moist limestone rocks in woods. All material collected was sterile. Also collected by Dr. Conard.

*Fissidens taxifolius* Hedw.
Common on soil in moist woods. Also collected by Dr. Conard.

On soil in prairie bog north of Cedar Rapids.

Ditrichaceae

*Bruchia Sullivanti* Aust.
Collected in Cedar Rapids by Dr. L. R. Wilson. Dr. Conard checked the identification and informed the author that this is the second recognizable Iowa collection.

*Ceratodon purpureus* (Hedw.) Brid.
Common. Reported from Cedar Rapids by Savage (1899). Also collected by Dr. Conard.

*Ditrichum pallidum* (Hedw.) Hanpe
Common. Also collected by Dr. Conard.

*Ditrichum pusillum* (Hedw.) E. G. Britton
Common on soil. Also collected by Dr. Conard.

*Pleuridium subulatum* (Hedw.) Lindb.
Not frequently collected but probably not rare.

Dicranaceae

*Dicranella heteromalla* (Hedw.) Schimp.

*Dicranella varia* (Hedw.) Schimp.
Also collected by Dr. Conard.

*Dicranum scoparium* Hedw.
Frequent on sandy soil only.
Leucobryaceae

*Leucobryum glaucum* (Hedw.) Schimp.
Distribution similar to that of *Dicranum scoparium* but more abundant.

Pottiaceae

*Barbula fallax* Hedw.
Common on clay soil, especially in exposed habitats. Collected by Dr. Conard also.
*Barbula unguiculata* Hedw.
A weedy species. Collected by Dr. Conard also.
*Desmatodon obtusifolius* (Schwaegr.) Jur.
Communicated by Dr. Conard.

Desmatodon *Porteri* James
Collected from crevices in low limestone cliffs along the Cedar River at Palisades State Park.

*Gymnostomum calceareum* Nees & Hornsch.
Communicated by Dr. Conard.

*Phaseum cuspidatum* Hedw. var. *americanum* Ren. & Card.
Communicated by Dr. Conard.

*Tortula mucronifolia* Schwaegr.
Communicated by Dr. Conard.

*Tortula ruralis* (Hedw.) Smith
Communicated by Dr. Conard.

*Weisia viridula* Hedw.
A weedy species.

Grimmiaceae

*Grimmia apocarpa* Hedw.
Frequent on rocks but not abundant.

*Hedwigia ciliata* Hedw.
Has been found on erratic granite boulders only.

Funariaceae

*Funaria hygrometrica* Hedw.
Common. Also collected by Dr. Conard.

*Physcomitrium accuminatum* (Schleich.) Bry. Eur.
Reported from Cedar Rapids by Savage (1899) as *P. accuminatum* Br. & Schimp. Savage specimen not seen.

*Physcomitrium turbinatum* (Mx.) Brld.
Common on clay soil. Probably the only species of *Physcomitrium* to be found in Linn County. Also collected by Dr. Conard

Orthotrichaceae

*Orthotrichum pumilum* Dicks.
From bark of an American Elm growing in forest northwest of Cedar Rapids.

*Orthotrichum strangulatum* Schwaegr.
On rocks. Communicated by Dr. Conard.

Timmiaceae

*Timmia megapolitana* Hedw.
On soil and moist limestone in woods. Some of the material has broad leaves and is referred to the variety *cucullata*. Also collected by Dr. Conard.
Aulacomniaceae

*Aulacomnium heterostichum* (Hedw.) Bry. Eur.
Common on moist banks in woods.

*Aulacomnium palustre* (Web. & Mohr) Schwaegr.
Common in boggy pastures. Reported by Cavanaugh (1929) as *A. palustre* Schwaegr. Collected by Dr. Conard in bog south of Coggon.

*Bartramia pomiformis* Hedw.
Frequent on moist banks with *Aulacomnium heterostichum*.

Bryaceae

*Byrhum argenteum* (L.) Hedw.
Common in exposed habitats. Also collected by Dr. Conard.

*Byrhum caespiticum* (L.) Hedw.
On soil, especially exposed road cuts. Also collected by Dr. Conard.

*Byrhum cuspidatum* (Bry. Eur.) Schimp.
Reported from Cedar Rapids by Savage (loc. cit.) as *B. intermedium* Brid. Andrews (1940, a) writes that *B. intermedium* (Ludw.) Brid. is a European species credited to America by early bryologists because, at that time, *B. cuspidatum* had not been segregated from *Byrhum binum* Schreb. The author has not seen Savage's collection.

*Pohlia nutans* (Hedw.) Lindb.
Common.

*Pohlia Wahlenbergii* (Web. & Mohr) Andrews
Frequent in wet habitats. Also collected by Dr. Conard.

*Rhodobryum roseum* (Bry. Eur.) Limpr.
On soil and in rock crevices in deep woods. Also collected by Dr. Conard.

Mniaceae

*Mnium affine* Bland.
Common in woods. Also collected by Dr. Conard.

*Mnium cuspidatum* Hedw.
A common species on a variety of substrata in woods. Also collected by Dr. Conard.

*Mnium orthorhynchum* Brid.
Communicated by Dr. Conard.

*Mnium serratum* Brid.
Collected at Palisades State Park on low cliffs and on soil in woods. Similar to the last but with larger leaf cells whose walls are thickened at the corners.

*Mnium stellare* Hedw.
Collected on bank of small creek in a deep, forested ravine northwest of Cedar Rapids.

Hypnaceae

*Climaciirnium americanum* Brid.
Collected only at Chain Lakes on wet, sandy soil in woods.

Brachytheciae

*Brachythecium oregeoladum* (Brid.) Jaeger & Sauerh.
Common on soil. Also collected by Dr. Conard.
Bryophytes of Linn County

1942] BRYOPHYTES OF LINN COUNTY

Bryoria graminicolor (Brid.) Grout
Frequent on soil and on moist limestone in woods. Also collected by Dr. Conard.

Chamberlainia acuminata (Hedw.) Grout.
Frequent on logs and tree bases in woods. Also collected by Dr. Conard.

Chamberlainia cyrtophylla (Kindb.) Grout
On logs in woods.

Eurhynchium hians (Hedw.) Jaeger & Sauerb.
Frequent on soil in shaded and partly shaded habitats. Seldom in fruit. Also collected by Dr. Conard.

Eurhynchium serrulatum (Hedw.) Kindb.
Frequent in moist shaded habitats. Also collected by Dr. Conard.

Amblystegiae

Amblystegium Juratzkam J,mm Schimp.
On soil and logs in moist woods. Also collected by Dr. Conard.

Amblystegium serpens (Hedw.) Bry. Eur.
Frequent on rotten wood in moist habitats.

Amblystegium varium (Hedw.) Lindb.
Frequent in moist habitats. Some of the material collected is the variety parvulum (Aust.) Mitt.

Calliergonella cuspidata (Brid.) Loeske.
Common on a wet prairie north of Cedar Rapids.

Campylium chrysophyllum (Brid.) Bryhn.
On rotten wood in moist habitats.

Campylium hispidulum (Brid.) Mitt.
On rotten wood in moist habitats. Also collected by Dr. Conard.

Drepanocladus aduncus (Hedw.) Warnst.
Common in wet prairie north of Cedar Rapids.

Hygroamblystegium irriguum (Wils.) Loeske.
Frequent on rocks in stream beds. Also collected by Dr. Conard.

Hygroamblystegium orthocladon (Beauv.) Grout
On rocks in stream beds.

Leptodictyum riparium (Hedw.) Warnst.
Frequent on soil and logs in wet habitats. Some of the Linn County material is the variety abbreviatum (Bry. Eur.) Grout.

Leptodictyum trichopodi um (Schultz) Warnst.
This species and its variety Kochii (Bry. Eur.) Broth. communicated by Dr. Conard.

Hylocomiae

Rhytidide adulphus triquetrus (Hedw.) Warnst.
Collected from Polytrichum jumiperinum mat at Chain Lakes.

Hypneae

Homomallium adnatum (Hedw.) Broth.
On rocks in woods.

Hypnum Patientiae Lindb.
Frequent on logs and on ground. Also collected by Dr. Conard.

Pylaisia Selwynii Kindb.
Probably common on tree trunks.
Platygyrium repens (Brid.) Bry. Eur.
Common on logs; trees, sometimes high on the trunks; and logs in woods. Also collected by Dr. Conard.

Plagiothecieae

Plagiothecium deplanatum (Sull.) Grout
Frequent in moist woods. Also collected by Dr. Conard.

Plagiothecium Roeseanum (Hampe) Bry. Eur.
On soil in moist woods.

Entodonteae

Entodon cladorhizans (Hedw.) C. Müll.
Frequent on logs in woods.

Entodon compressus (Hedw.) C. Müll.
Frequent on tree bases in woods.

Entodon seductrix (Hedw.) C. Müll.
Frequent on logs in woods. Also collected by Dr. Conard. The variety tenuis Grout, was collected about five feet from the ground on the trunk of an American Elm growing in a deep, wooded ravine northwest of Cedar Rapids. Dr. Conard identified this material. To the authors knowledge this variety has not been reported for Iowa previously.

Leskeaceae

Anomodon attenuatus (Hedw.) Hüben
Frequent on tree bases and limestone rocks in woods, occasionally on soil. Also collected by Dr. Conard

Anomodon minor (Beauv.) Lindb.
Frequent on tree bases and limestone rocks in woods. Also collected by Dr. Conard.

Anomodon rostratus (Hedw.) Schimp.
Frequent in moist woods on tree bases, on limestone rocks, and on soil. Also collected by Dr. Conard.

Helodium paludosum (Sull.) Aust.
Collected by Dr. Conard in bog south of Coggon.

Leskea gracilescens Hedw.
Common on tree bases. Also collected by Dr. Conard.

Lindbergia brachyptera (Mitt.) Kindb., var. Austinii (Sull.) Grout
On tree bases in woods. Probably not common. Also collected by Dr. Conard.

Thelia asprella Sull.
Probably frequent on tree bases in woods. Conard (1938) reports that it is found on white oaks especially. Also collected by Dr. Conard.

Thuidium delicatulum (Hedw.) Mitt.
On logs in woods. Not frequent.

Thuidium pygmaeum Bry. Eur.
Frequent with Fissidens minutulus on limestone rocks in deep, forested valleys at Palisades State Park.

Thuidium recognitum (Hedw.) Lindb.
Also collected by Dr. Conard.
**Thuidium virginianum** (Brid.) Lindb.
On logs, not frequent. Also collected by Dr. Conard. This species, in Iowa, seems to merge into *T. microphyllum*. Also collected by Dr. Conard.

**HEPATICAEC**

**Lepidoziaceae**

*Lepidozia reptans* (L.) Dumort.
Collected at Chain Lakes by Dr. L. R. Wilson.

**Cephaloziaceae**

*Cephalozia connivens* (Dicks.) Lindb.
Reported from Linn county by Conard (1940) as *C. connivens* (Dicks.) Spruce.

**Harpantaceae**

*Lophocolen heterophylla* (Schrad.) Dumort.
In moist woods on rotten wood and at times on soil. The most common leafy liverwort.

**Jungermanniaceae**

*Plectocolea crenulata* (Smith) Evens, var. *gracillemma*
Collected by Dr. Conard in bog south of Coggon. Conard (1942)

**Plagiochiilaceae**

*Plagiochila asplenioides* (L.) Dumort.
Frequent in wet habitats. All material collected has entire leaves. Dr. Conard informs the author that this condition is characteristic of Iowa material.

**Porellaceae**

*Porella platyphyllloidea* (Schwein.) Lindb.
Neither abundant nor frequent. Found on tree trunks and rocks in moist woods. Also collected by Dr. Conard.

**Frullaniaceae**

*Frullania eboracensis* Gottsche
Frequent on tree trunks in moist woods. Also collected by Dr. Conard.

*Frullania squarrosa* (R. Bl. & N.) Dumort.
Collected by Dr. Conard at Palisades State Park. Conard (1942).

**Blasiaceae**

*Blasia pusilla* L.
Collected at Coggon pond by Dr. Conard. Conard (1942).

**Marchantiaceae**

*Marchantia polymorpha* L.
Frequent in moist shaded habitats. Also collected by Dr. Conard.

*Preissia quadrata* (Scop.) Nees
Collected by Dr. Conard at Palisades State Park. Conard (1942).

*Conocephalum conicum* (L.) Dumort.
More frequent than *Marchantia polymorpha* in similar habitats. Also collected by Dr. Conard.

**Rebouliaceae**

*Reboulia hemisphaerica* (L.) Raddi
Frequent on soil and in rock crevices in moist woods. Also collected by Dr. Conard.
Mannia rupestris (Nees) Frye & Clark
Reported by Shimek (1899) as Grimaldia barbifrons Besch.
Shimek collection not seen by the present author.

Mannia fragrans (Balb.) Frye & Clark
Conard (1942).

Ricciotheca

Ricciocarpus natans (L.) Corda
Abundant on wet soil and in water at Chain Lakes. Previously reported by Conard (1940).

Riccia fluitans L.
Reported from Cedar Rapids by Shimek (loc. cit.). Also reported from Linn county by Conard (1942).

Anthocerotaceae

Anthoceros laevis L.
Collected by Dr. Conard on shore of pond south of Coggon. Conard (1942).

BIBLIOGRAPHY


