

## Mosses of Texas

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This list was created to serve as a faux but searchable database of the mosses of Texas until a real database is created by a real bryologist. Principal sources are the two "mosses of Texas" publications, i.e., Whitehouse & McAllister (1954) and Mahler (1980). Other sources include Magill, 1972; Magill, 1973; Magill, 1974; Magill, 1976; Magill, 1991; Pursell & Reese, 1963; Redfearn, 1973, Redfearn 1981, Stoneburner & Wyatt, 1979; and Wyatt & Stoneburner, 1980. A few records are from on-line specimen databases, such as The New York Botanical Garden American Bryophyte Catalog and the TAMU-BWG Herbarium Specimen Browser. This information has not been checked by a competent bryologist, and many duplications and errors should be expected.

Nomenclature in this draft is unstable. It will one day be altered to conform with Anderson, Crum & Buck (1990)-- if the copy I ordered from the American Bryological and Lichenological Society on 18 December 2002 ever gets here. Placement of genera within families, and the numbering of those families, agree with online draft treatments in the Bryological Flora of North America Volumes 1 and 2. Asterisks flag taxa recognized in the relatively few finished treatments for the Bryological Flora of North America.

### 50. Amblystegiaceae

*Amblystegium riparium* (Hedw.) B.S.P. (*Leptodictyum riparium* (Hedw.) Warnst. Crum & Anderson (1981) listed these heterotypic synonyms: *Leptodictyum laxirete* (Card. & Thér.) Broth.; *Leptodictyum brevipes* (Card. & Thér.) Broth.; *Leptodictyum pennelli* (Bartr.) Robins.); *Leptodictyum siphon* (Beuav.) Broth. State report(s): Whitehouse & McAllister, 1954 (as *Leptodictyum brevipes*, *Leptodictyum siphon*, *Brachythecium pennellii* and 5 formae of *Leptodictyum riparium*); Mahler, 1980 (as *Leptodictyum riparium*, *Leptodictyum laxirete*, *Leptodictyum pennellii*, *Leptodictyum siphon* and *Leptodictum brevipes*); Redfearn, 1981 (as *Amblystegium riparium*); Lemke, 1989 (as *Amblystegium riparium*). Illustration(s): Lawton, 1971 (pl. 147, figs. 8-13, as *Amblystegium riparium*); Flowers, 1973 (p. 467, as *Amblystegium riparium*); Crum & Anderson, 1981 (p. 939, as *Amblystegium riparium*); Watson & Richards, 1981 (p. 340, as *Leptodictyum riparium*); Reese, 1984 (p. 206, as *Amblystegium riparium*); Sharp et al., 1994 (p. 894, as *Leptodictyum riparium*). This aquatic occurs in Barton Springs (Mike Lyday pers. comm., Jan 2003) and in the San Marcos River (Lemke, 1989).

*Amblystegium serpens* (Hedw.) Schimp. in B.S.G. State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Prior, 1961; Pursell & Reese, 1963; Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 121); Flowers, 1973 (p. 461); Crum & Anderson, 1981 (p. 934); Watson & Richards, 1981 (p. 341); Sharp et al., 1994 (p. 892).

*Amblystegium varium* (Hedw.) Lindb. (incl. var. *lancifolium* Grout). State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Prior, 1961; Pursell & Reese, 1963; Magill, 1973; Mahler, 1980; Crum & Anderson, 1981 (p. 932); Redfearn, 1981; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 121); Flowers, 1973 (p. 463); Reese, 1984 (p. 206); Sharp et al., 1994 (p. 892).

\**Campylophyllum hispidulum* (Brid.) Hedenas (*Campylium hispidulum* (Brid.) Mitt.). State report(s): Whitehouse & McAllister, 1954 (as *Campylium hispidulum*); Pursell & Reese, 1963 (as *Campylium hispidulum*); Magill, 1974 (as *Campylium hispidulum*); Magill, 1976 (as *Campylium hispidulum*); Mahler, 1980 (as *Campylium hispidulum*). Illustration(s): Conard, 1956 (p. 136, as *Campylium hispidulum*); Flowers, 1973 (p. 477, *Campylium hispidulum*); Crum & Anderson, 1981 (p. 948, as *Campylium hispidulum*); Reese, 1984 (p. 202, as *Campylium hispidulum*); Sharp et al., 1994 (p. 900,

- as *Campylium hispidulum*).
- Donrichardia macroneuron* (Grout) Crum & Anderson (*Eurhynchium macroneuron* (Grout) Crum; *Hygroamblystegium macroneuron* Grout). State report(s): Grout, 1933; Whitehouse & McAllister, 1954 (as *Hygroamblystegium macroneuron*); Crum & Anderson, 1979; Mahler, 1980 (as *Eurhynchium macroneuron*); Wyatt & Stoneburner, 1980. Illustration(s): Crum & Anderson, 1979; Wyatt & Stoneburner, 1980; Crum & Anderson, 1981 (p. 921). According to Wyatt & Stoneburner (1980), this moss is endemic to Texas, known only from the Seven Hundred Springs along the South Llano River in northeastern Edwards County.
- Hygroamblystegium fluviatile* (Hedw.) Loeske (*Amblystegium fluviatile* (Hedw.) B.S.G.). State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Redfearn, 1981 (as *Amblystegium fluviatile*). Illustration(s): Flowers, 1973 (p. 471, as *Amblystegium fluviatile*); Crum & Anderson, 1981 (p. 934, as *Amblystegium fluviatile*). On stones submersed in calcareous water.
- Hygroamblystegium tenax* (Hedw.) Jenn. var. *tenax* (*Amblystegium tenax* (Hedw.) C. Jens. var. *tenax*; *Hygroamblystegium orthocladon* (Beauv.) Grout). State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Redfearn, 1981 (as *Amblystegium tenax* var. *tenax*). Illustration(s): Flowers, 1973 (p. 469, as *Amblystegium tenax*); Crum & Anderson, 1981 (p. 929, as *Amblystegium tenax*); Sharp et al., 1994 (p. 891). On wet rocks in and along streams.
- Leptodictyum humile* (P.-Beauv.) Ochyra (*Leptodictyum trichopodium* (Schultz) Warnst; *Amblystegium trichopodium* (Schult.) Hartm.). State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980; Crum & Anderson, 1981 (p. 937, as *Amblystegium trichopodium*); Redfearn, 1981 (as *Amblystegium trichopodium*). Illustration(s): Conard, 1956 (p. 119); Crum & Anderson, 1981 (p. 937, as *Amblystegium trichopodium*); Sharp et al., 1994 (p. 895).
- Leptodictyum trichopodium* (Schultz) Warnst. (*Amblystegium trichopodium* (Schult.) Hartm.). State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980; Redfearn, 1981 (as *Amblystegium trichopodium*). Illustration(s): Conard, 1956 (p. 119). \*Sharp et al. place this in synonymy under *Leptodictyum humile*.
- Leptodictyum trichopodium* (Schultz) Warnst. var. *kochii* (B.S.G.) Broth. State report(s): Whitehouse & McAllister, 1954. \*Sharp et al. place the species in synonymy under *Leptodictyum humile*.
- \**Platylomella lescurii* (Sull.) Andrews (*Hypnum lescurii* Sull; *Androstegium lescurii* (Sull.) Aust.; *Sciaromium lescurii* (Sull.) Broth.) State report(s): BFNA, 2002 (*Platylomella lescurii*). Illustration(s): Reese, 1984 (p. 206, as *Sciaromium lescurii*).

#### 76. Anomodontaceae

- Anomodon attenuatus* (Hedw.) Hüb. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 107); Reese, 1984 (p. 194); Sharp et al., 1994 (p. 684).
- Anomodon minor* (Hedw.) Fühnr. State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Pursell & Reese, 1963; Magill, 1974; Mahler, 1980. Illustration(s): Conard, 1956 (p. 107); Reese, 1984 (p. 194); Sharp et al., 1994 (p. 685).
- Anomodon rostratus* (Hedw.) Schimp. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 106); Sharp et al., 1994 (p. 682).
- Haplohymenium triste* (Ces.) Kindb. State report(s): Reese, 1961; Mahler, 1980. Illustration(s): Reese, 1984 (p. 194); Sharp et al., 1994 (p. 687).
- Herpetineuron tocoae* (Sull. & Lesq. ex Sull.) Card. State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Reese, 1984 (p. 194); Sharp et al., 1994 (p. 688).

#### \*19. Archidiaceae

- Archidium alternifolium* (Hedw.) Schimp. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Crum & Anderson, 1981 (p. 73); Reese, 1984 (p. 71); Sharp et al., 1994 (p. 29).
- Archidium donnellii* Aust. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Crum & Anderson, 1981 (p. 78); Reese, 1984 (p. 71); Sharp et al., 1994 (p. 27). According to Reese (1984), this species of the eastern US is rare on the coastal plain, known only from Bastrop County.
- Archidium hallii* Aust. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Crum & Anderson, 1981 (p. 78); Reese, 1984 (p. 71); Sharp et al., 1994 (p. 28).
- Archidium minus* (Ren. & Card.) Snider (*Archidium hallii* Aust. var. *minus* Ren. & Card.) State report(s): Whitehouse & McAllister, 1954 (as *Archidium hallii* var. *minus*). Illustration(s): Crum & Anderson, 1981 (p. 72); Reese, 1984 (p. 71).
- Archidium ohioense* Schimp. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 63); Crum & Anderson, 1981 (pp. 76 and 77); Reese, 1984 (p. 71); Sharp et al., 1994 (p. 27).
- Archidium tenerimum* Mitt. State report(s): Mahler, 1980. Illustration(s): Crum & Anderson, 1981 (p. 74); Reese, 1984 (p. 71); Sharp et al., 1994 (p. 29).

### 39. Aulacomniaceae

- Aulacomnium heterostichum* (Hedw.) B.S.G. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Conard, 1956 (p. 85); Reese, 1984 (p. 147).
- Aulacomnium palustre* (Hedw.) Schwaegr. State report(s): Whitehouse & McAllister, 1954; Magill, 1972; Mahler, 1980. Illustration(s): Conard, 1956 (p. 56); Flowers, 1973 (p. 319); Watson & Richards, 1981 (p. 294); Reese, 1984 (p. 147); Sharp et al., 1994 (p. 538).

### 40. Bartramiaceae

- Anacolia laevisphaera* (Tayl.) Flow. State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 572).
- Bartramia stricta* Brid. State report(s): Specimen cited in NYBG database. Illustration(s): Lawton, 1971 (pl. 114, figs. 8-11). Ranked G2G4 by NatureServe, January 2003. Element code: NBMUS0R060.
- Philonotis calcarea* (B.S.G.) Schimp. (*Philonotis fontana* ssp. *calcarea* (Bruch & Schimp.) Bouley). State report(s): Whitehouse & McAllister, 1954.
- Philonotis capillaris* Lindb. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 115, figs. 12-16).
- Philonotis fontana* (Hedw.) Brid. var. *fontana*. State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 116, figs. 1-6); Flowers, 1973 (p. 330, 334); Watson & Richards, 1981 (p. 298); Sharp et al., 1994 (p. 557).
- Philonotis fontana* var. *pumila* (Turn.) Brid. State report(s): Whitehouse & McAllister, 1954; mentioned by but not recognized by Mahler. Illustration(s): Lawton, 1971 (pl. 116, figs. 7-9).
- Philonotis glaucescens* (Hornsch.) Par. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980; Redfearn, 1981. Illustration(s): Reese, 1984 (p. 152). [\*\*Treated by Sharp et al. in synonymy under *P. uncinata*.]
- Philonotis gracillima* Ångstr. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Redfearn, 1981. [\*\*Treated by Sharp et al. in synonymy under *P. uncinata*.]
- Philonotis longiseta* (Michx.) Britt. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Conard, 1956 (p. 57); Reese, 1984 (p. 152); Sharp et al., 1994 (p. 559).
- Philonotis marchica* (Hedw.) Brid. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Redfearn, 1981; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Reese, 1984 (p. 152); Sharp et al., 1994 (p. 558).

- Philonotis sphaerocarpa* (Hedw.) Brid. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 562).
- Philonotis uncinata* (Schwaegr.) Brid. State report(s): Whitehouse & McAllister, 1954. Illustration(s): Sharp et al., 1994 (p. 561).

#### 59. Brachytheciaceae

- Brachythecium acuminatum* (Hedw.) Aust. (*Chamberlainia acuminata* (Hedw.) Grout; *Brachythecium biventrosus* (C. Müll.) Jaeg. & Sauerb.; *Chamberlainia biventrosa* (C. Müll.) Grout; *Brachythecium splendens* Aust.). State report(s): Whitehouse & McAllister, 1954 (as *Brachythecium splendens*, p. 110; *Chamberlainia acuminata*, p. 112; and *Chamberlainia biventrosa*, p. 112); Pursell & Reese, 1963 (as *Chamberlainia acuminata*); Mahler, 1980. Illustration(s): Conard, 1956 (p. 128, as *Chamberlainia acuminata*); Reese, 1984 (p. 211).
- Brachythecium collinum* (Schleich.) B.S.G. State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 133); Lawton, 1971 (pl. 160, figs. 7-15); Flowers, 1973 (p. 426); Sharp et al., 1994 (p. 923).
- Brachythecium fendleri* (Sull.) Jaeg. & Sauerb. (*Brachythecium utahense* James). State report(s): Whitehouse & McAllister, 1954 (as *Brachythecium utahense*); Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 160, figs. 16-19); Flowers, 1973 (p. 431); Sharp et al., 1994 (p. 924).
- Brachythecium laetum* (Brid.) Schimp. (*Brachythecium oxycladon* (Brid.) Jaeg. & Sauerb.; see Robinson & Ignatov, 1997). State report(s): Whitehouse & McAllister, 1954 (as *Brachythecium oxycladon*); Prior, 1961 (as *Brachythecium oxycladon*); Pursell & Reese, 1963 (as *Brachythecium oxycladon*); Mahler, 1980 (as *Brachythecium oxycladon*). Illustration(s): Flowers, 1973 (p. 438, as *Brachythecium oxycladum*); Reese, 1984 (p. 211, as *Brachythecium oxycladum*); Sharp et al., 1994 (p. 925, as *Brachythecium oxycladon*).
- Brachythecium rotaeanum* De Not. Rota's feather moss. State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Reese, 1984 (fig 52e-f, p. 211). Ranked G3G4 by NatureServe, January 2003. Element code: NBMUS0Z0Q0.
- Brachythecium rutabulum* (Hedw.) Schimp. in B.S.G. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 132); Lawton, 1971 (pl. 166, figs. 1-4); Watson & Richards, 1981 (p. 361).
- Brachythecium salebrosum* (Web. & Mohr.) Schimp. in B.S.G. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 131).
- Brachythecium stereopoma* (Spruce ex Mitt.) Jaeg. & Sauerb. (*Brachythecium wootonii* Grout). State report(s): Whitehouse & McAllister, 1954 (as *Brachythecium wootonii*); Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 928).
- Bryoandersonia illecebra* (Hedw.) Robins. (*Cirriphyllum boscii* (Schwaegr.) Grout; *Cirriphyllum illecebra* (Hedw.) L. Koch). State report(s): Whitehouse & McAllister, 1954 (as *Cirriphyllum boscii*); Pursell & Reese, 1963 (as *Cirriphyllum boscii*); Magill, 1974; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 116, as *Cirriphyllum boscii*); Reese, 1984 (p. 211, as *Bryoandersonia illecebra*).
- Clasmatodon parvulus* (Hampe) Sull. State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Pursell & Reese, 1963; Magill, 1972; Magill, 1973; Magill, 1974; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 119); Reese, 1984 (p. 186).
- EXCLUDE? *Clasmatodon parvulus* (Hampe) Sull. var. *rupestris* Sull. & Lesq. State report(s): Whitehouse & McAllister, 1954; Magill, 1972. Note that Mahler (1980) treated this variety as synonymous with the typical variety.
- Eurhynchium hians* (Hedw.) Jaeg. & Sauerb. (*Oxytrichium hians* (Hedw.) Loeske). State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963 (as *Oxytrichium hians*); Magill, 1974; Mahler, 1980. Illustration(s): Conard, 1956 (p. 126); Reese, 1984 (p. 213).

- Eurhynchium pulchellum* (Hedw.) Jenn. var. *pulchellum* (*Rhynchostegium pulchellum* (Hedw.) Robins. var. *pulchellum*). State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Lawton, 1971 (pl. 169, figs. 1-3); Flowers, 1973 (p. 421); Reese, 1984 (p. 213, as (*Eurhynchostegium pulchellum*); Sharp et al., 1994 (p. 933, as *Rhynchostegium pulchellum* var. *pulchellum*).
- Eurhynchium pulchellum* (Hedw.) Jenn. var. *praecox* (Hedw.) Jenn. (*Rhynchostegium pulchellum* (Hedw.) Robins. var. *praecox* (Hedw.) McFarland). State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Redfearn, 1981.
- Eurhynchium pulchellum* (Hedw.) Jenn. var. *robustum* (Roell) Jenn. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963.
- Eurhynchium riparioides* (Hedw.) Richards. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 168, figs. 13-17).
- Eurhynchium serrulatum* (Hedw.) Kindb. (*Brachythecium serrulatum* (Hedw.) Robins.; *Rhynchostegium serrulatum* (Hedw.) Jaeg.). State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963 (as *Rhynchostegium serrulatum*); Magill, 1973 (as *Rhynchostegium serrulatum*); Mahler, 1980 (as *Rhynchostegium serrulatum*); Redfearn, 1981 (as *Rhynchostegium serrulatum*); Neumann, Rushing, Bazán & Mueller, 1983 (as *Rhynchostegium serrulatum*). Illustration(s): Conard, 1956 (p. 122); Reese, 1984 (p. 213, as *Rhynchostegium serrulatum*).
- \**Homalotheciella subcapillata* (Hedw.) Broth. State report(s): Magill, 1974; Mahler, 1980. Illustration(s): Conard, 1956 (p. 128); Reese, 1984 (p. 206).
- Homomallium adnatum* (Hedw.) Broth. State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Prior, 1961; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Conard, 1956 (p. 138); Reese, 1984 (p. 221).
- Homomallium mexicanum* Card. var. *mexicanum*. State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1976; Mahler, 1980; Redfearn, 1981; Sharp et al., 1994 (p. 1016).
- Homomallium mexicanum* Card. var. *latifolium* Card. State report(s): Whitehouse & McAllister, 1954; Magill, 1972; Mahler, 1980.
- Palamocladium leskeoides* (Hook.) Britt. (*Homalothecium bonplandii* (Hook.) Jaeg. & Sauerb.; *Leskea bonplandii*; *Hookeria leskeoides* Hook.) State report(s): Whitehouse & McAllister, 1954 (as *Homalothecium bonplandii*); Mahler, 1980; Sharp et al., 1994 (p. 912, as *Palamocladium leskeoides*). "On calcareous cliffs and boulders, sometimes near water" (Crum & Anderson, 1981).

#### 24. Bruchiaceae

- Bruchia brevifolia* Sull. State report(s): Whitehouse & McAllister, 1954; Magill, 1973; Mahler, 1980. Illustration(s): Reese, 1984 (p. 79).
- Bruchia donnellii* Aust. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980.
- Bruchia drummondii* Hampe ex Britt. State report(s): Whitehouse & McAllister, 1954; Magill, 1973; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Reese, 1984 (p. 79).
- Bruchia flexuosa* (Sw. ex Schawegr.) C. Müll. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Reese, 1984 (p. 79).
- Bruchia fusca* E. G. Britton. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980.
- Bruchia hallii* Aust. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Reese, 1984 (p. 79).
- Bruchia ravenelii* Aust. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Reese, 1984 (p. 79).
- Bruchia sullivantii* Aust. State report(s): Whitehouse & McAllister, 1954; Magill, 1973; Mahler, 1980. Illustration(s): Conard, 1956 (p. 65).
- Bruchia texana* Aust. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Redfearn, 1981.

Illustration(s): Conard, 1956 (p. 65).

#### 42. Bryaceae

- Brachymerium mexicanum* Mont. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 499).
- Brachymerium systylium* (C. Müll.) Jaeg. & Sauerb. State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 495).
- Bryum angustirete* Kindb. ex. Macoun (*Bryum pendulum* (Hornsch) Schimp.; treated by Crum & Anderson (1981) as *Bryum algovicum* Sendty. ex. C. Muell.) State report(s): Whitehouse & McAllister, 1954 (as *Bryum pendulum*); Mahler, 1980. Illustration(s): Flowers, 1973 (p. 361, as *Bryum angustirete*).
- Bryum apiculatum* Schwaegr. (*Pohlia apiculata* (Schwaegr.) Crum & Anders.; *Bryum cruegeri* Hampe ex Müll.; *Pohlia cruegeri* (Hampe ex Müll.) Andr.) State report(s): Pursell & Reese, 1963; Mahler, 1980; Redfearn, 1981. Illustration(s): Reese, 1984 (p. 133); Sharp et al., 1994 (p. 473).
- Bryum argenteum* Hedw. var. *argenteum*. State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Prior, 1960; Pursell & Reese, 1963; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Lawton, 1971 (pl. 89, figs. 19-27); Flowers, 1973 (p. 381); Reese, 1984 (p. 138); Sharp et al., 1994 (p. 462); Watson & Richards, 1981 (p. 278).
- Bryum argenteum* Hedw. var. *lanatum* (P.-Beauv.) B.S.G. (*Mnium lanatum* P.-Beauv.) State report(s): Whitehouse & McAllister, 1954; Magill, 1976. Note that this variety is not recognized by Sharp et al. (1994).
- Bryum bicolor* Dicks. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 90, figs. 1-7); Flowers, 1973 (p. 379); Watson & Richards, 1981 (p. 279); Reese, 1984 (p. 142). [\*Treated by Sharp et al. in synonymy under *Bryum dichotomom* Hewd., which is illustrated on p. 463).
- Bryum billardieri* Schwaegr. [probably the *Bryum truncorum* of Whitehouse & McAllister, 1954]. State report(s): Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Sharp et al., 1994 (p. 484).
- Bryum caespiticium* Hedw. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Conard, 1956 (p. 89); Lawton, 1971 (pl. 90, figs. 16-21); Flowers, 1973 (p. 373); Watson & Richards, 1981 (p. 277); Sharp et al., 1994 (p. 475).
- Bryum capillare* Hedw. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 91, figs. 1-10); Flowers, 1973 (p. 376); Watson & Richards, 1981 (p. 282); Reese, 1984 (p. 138); Sharp et al., 1994 (p. 479).
- Bryum creberrimum* Tayl. (*Bryum flagellosum* Kindb.) State report(s): Whitehouse & McAllister, 1954 (as *Bryum flagellosum*); Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 91, figs. 11-16); Flowers, 1973 (p. 370).
- Bryum gemmiparum* De Not. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Redfearn, 1981. Illustration(s): Lawton, 1971 (pl. 92, figs. 13-17); Flowers, 1973 (p. 381).
- Bryum lisae* De Not. var. *cuspidatum* (B.S.G.) Marg. (*Bryum cuspidatum* (B.S.G.) Schimp.) State report(s): Reese, 1984; reported on Galloway's South Texas Moss Project, January 2003. Illustration(s): Reese, 1984 (p. 138).
- Bryum pseudotriquetrum* (Hedw.) Gaertn. et al. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Redfearn, 1981. Illustration(s): Conard, 1956 (p. 90); Lawton, 1971 (pl. 94, figs. 7-13); Flowers, 1973 (p. 371); Watson & Richards, 1981 (p. 275); Reese, 1984 (p. 138); Sharp et al., 1994 (p. 477).
- Bryum stenotrichum* C. Müll. (*Bryum inclinatum* (Web. & Mohr) Sturm.) State report(s): Whitehouse & McAllister, 1954 (as *Bryum inclinatum*); Magill, 1976; Mahler, 1980. Illustration(s): Flowers, 1973 (p. 361).
- Bryum turbinatum* (Hedw.) Smith. State report(s): Whitehouse & McAllister, 1954; Magill, 1973; Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 95, figs. 8-12).

- Leptobryum pyriforme* (Hedw.) Schimp. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 74); Lawton, 1971 (pl. 97, figs. 1); Flowers, 1973 (p. 339); Watson & Richards, 1981 (p. 265); Reese, 1984 (p. 138); Sharp et al., 1994 (p. 505).
- Plagiobryum demissum* (Hoppe & Honsch.) Lindb. State report(s): Whitehouse & McAllister, 1954. Illustration(s): Lawton, 1971 (pl. 97, figs. 15-18).
- Pohlia drummondii* (C. Müll.) Andrews. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 100, figs. 10-13); Flowers, 1973 (p. 347).
- Pohlia elongata* Hedw. State report(s): Magill, 1972; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 101, figs. 1-5); Flowers, 1973 (p. 349); Sharp et al., 1994 (p. 534).
- Pohlia wahlenbergii* (Web. & Mohr) Andrews. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 86); Lawton, 1971 (pl. 103, figs. 6-17); Flowers, 1973 (p. 355); Reese, 1984 (p. 133); Sharp et al., 1994 (p. 510).
- Rhodobryum beyrichianum* (Hornsch.) Par. (*Bryum beyrichianum* (Hornsch.) C. Muell.) State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 488, as *Bryum beyrichianum*).
- Rhodobryum roseum* (Hedw.) Limpr. (*Bryum roseum* (Hedw.) Gaertn.) State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Conard, 1956 (p. 87); Watson & Richards, 1981 (p. 285); Sharp et al., 1994 (p. 486, as *Bryum roseum*).

### 33. Calymperaceae

- \**Syrrophodon parasiticus* (Brid.) Besch. State report(s): Reese, 1959; Mahler, 1980. Illustration(s): Reese, 1984 (p. 93); Sharp et al., 1994 (p. 200).
- \**Syrrophodon texanus* Sull. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1974; Mahler, 1980; Reese, 1984. A North American endemic that ranges from Maryland and southern Ohio Florida and east Texas; somewhat disjunct on the eastern Balcones Escarpment (Reese, 1984). Illustration(s): Conard, 1956 (p. 41); Reese, 1984 (p. 93); Sharp et al., 1994 (p. 201).

### 58. Campyliaceae

- \**Anacamptodon splachnoides* (Fröl. ex Brid.) Brid. Knot-hole moss. State report(s): Whitehouse & McAllister, 1954; Crum, 1958; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Conard, 1956 (p. 120).
- \**Campyliadelphus chrysophyllus* (Brid.) Kandel (*Campylium chrysophyllum* (Brid.) J. Lange var. *chrysophyllum*). State report(s): Whitehouse & McAllister, 1954 (as *Campylium chrysophyllum*); Pursell & Reese, 1963 (as *Campylium chrysophyllum*); Magill, 1974 (as *Campylium chrysophyllum* var. *chrysophyllum*); Magill, 1976 (as *Campylium chrysophyllum*); Mahler, 1980 (as *Campylium chrysophyllum* var. *chrysophyllum*); Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 119, as *Campylium chrysophyllum*); Lawton, 1971 (pl. 151, figs. 1-4, as *Campylium chrysophyllum*); Flowers, 1973 (p. 477, as *Campylium chrysophyllum*); Watson & Richards, 1981 (p. 338, as *Campylium chrysophyllum*); Reese, 1984 (p. 202, as *Campylium chrysophyllum*); Sharp et al., 1994 (p. 901, as *Campylium chrysophyllum*).
- EXCLUDE? *Campylium chrysophyllum* (Brid.) J. Lange. var. *brevifolium* (Ren. & Card.) Grout. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980; Redfearn, 1981. Not recognized by BFNA, 2002; submerged in *Campyliadelphus chrysophyllus*.
- \**Conardia compacta* (C. Müll.) Robinson (*Amblystegium americanum* Grout; *Amblystegium compactum* (C. Müll.) Aust.; *Amblystegium subcompactum* (Müll.) Lindb. State report(s): BFNA, 2002. Illustration(s): Sharp et al., 1994 (p. 947).
- \**Drepanocladus aduncus* (Hedw.) Warnst. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Not reported for Texas in BFNA (2002); simple omission? Illustration(s): Conard, 1956 (p. 114);

Lawton, 1971 (pl. 153, figs. 1-6); Flowers, 1973 (p. 499); Watson & Richards, 1981 (p. 342); Sharp et al., 1994 (p. 903). A species found attached to limestone rocks submerged in flowing water.

#### 67. Climaciaceae

- Climacium americanum* Brid. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 110); Reese, 1984 (p. 161).
- Climacium kindbergii* (Ren. & Card.) Grout. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963. Illustration(s): Conard, 1956 (p. 110). Note that Mahler (1980) lumps this under *Climacium americanum*.

#### 51. Cratoneuraceae

- Cratoneuron filicinum* (Hedw.) Roth. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 111); Lawton, 1971 (pl. 152, figs. 1-4); Flowers, 1973 (p. 507); Watson & Richards, 1981 (p. 334); Sharp et al., 1994 (p. 889).

#### 71. Cryphaeaceae

- \**Cryphaea glomerata* Bruch & Schimp. ex Sull. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1973; Magill, 1974; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 103); Reese, 1984 (p. 171).
- \**Cryphaea nervosa* (Hook. & Wils.) J.K.A. Müller. State report(s): Mahler, 1980. Illustration(s): Reese, 1984 (p. 171).

#### 23. Dicranaceae

- \**Campylopus flexuosus* (Hedw.) Brid. (*Dicranum flexuosum* Hedw.). State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 21, figs. 11-14); Sharp et al., 1994 (p. 128).
- \**Campylopus pilifer* Bridel (*Campylopus leucotrichus* Sull. & Lesq.; probably the *Campylopus introflexus* of Whitehouse & McAllister, 1954). State report(s): Mahler, 1980. Illustration(s): Reese, 1984 (p. 86); Sharp et al., 1994 (p. 134). On exposed granite in Burnet and Llano counties (Frahm, 1980).
- Dichondontium pellucidum* (Hedw.) Schimp. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 42).
- \**Dicranella heteromalla* (Hedw.) Schimp. (incl. var. *orthocarpa* (Hedw.) Jaeg. & Sauerb.; *Dicranum heteromallum* Hedw.) State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1973; Mahler, 1980. Illustration(s): Conard, 1956 (p. 78); Lawton, 1971 (pl. 25, figs. 9-13); Reese, 1984 (p. 82).
- \**Dicranella hilariana* (Mont.) Mitt. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Texas not mentioned in range reported in draft treatment for BFNA, 2002. Illustration(s): Conard, 1956 (p. 67); Reese, 1984 (p. 82); Sharp et al., 1994 (p. 115).
- \**Dicranella varia* (Hedw.) Schimp. (*Dicranum varium* Hedw.). State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Conard, 1956 (p. 68); Lawton, 1971 (pl. 27, figs. 7-14); Watson & Richards, 1981 (p. 176); Reese, 1984 (p. 82); Sharp et al., 1994 (p. 115).
- Dicranoweisia cirrhata* (Hedw.) Lindb. (incl. *Didymodon hinckleyi* Bartram). State report(s): Bartram, 1940 (as *Didymodon hinckleyi*); Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 69); Lawton, 1971 (pl. 29, figs. 1-15); Watson & Richards, 1981 (p. 181); Sharp et al., 1994 (p. 154).
- \**Dicranum condensatum* Hedw. (*Dicranum sabuletorum* Ren. & Card.). State report(s): Whitehouse &

- McAllister, 1954; Mahler, 1980 (as *Dicranum sabuletorum*). Illustration(s): Reese, 1984 (p. 88).
- \**Dicranum polysetum* Sw. (*Dicranum rugosum* (Funck) Brid.) State report(s): Specimen cited in NYBG database. Illustration(s): Lawton, 1971 (pl. 31, figs. 14-16).
- \**Dicranum scoparium* Hedw. (*Dicranum latifolium* Amann). State report(s): Reese, 1984 ("eastern Texas"). Illustration(s): Reese, 1984 (p. 88).

## 26. Ditrichiaceae

- Ceratodon purpureus* (Hedw.) Brid. State report(s): Whitehouse & McAllister, 1954; Flowers, 1973 (p. 102); Magill, 1976; Redfearn, 1981. Illustration(s): Lawton, 1971 (pl. 14, figs. 1-12); Sharp et al., 1994 (p. 105).
- Ditrichum pallidum* (Hedw.) Hampe. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1972; Mahler, 1980; Redfearn, 1981; Magill, 1973; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Reese, 1984 (p. 75).
- Ditrichum pusillum* (Hedw.) Hampe. State record(s): Magill, 1974; Mahler, 1980. Illustration(s): Reese, 1984 (p. 75).
- Pleuridium ravenelii* Aust. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Reese, 1984 (p. 75).
- Pleuridium subulatum* (Hedw.) Lindb. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980; Redfearn, 1981. Illustration(s): Conard, 1956 (p. 65); Lawton, 1971 (pl. 17, figs. 11-16); Reese, 1984 (p. 75); Sharp et al., 1994 (p. 96).
- Pleuridium sullivantii* Aust. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 97).
- Trematodon longicollis* Michx. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 75); Reese, 1984 (p. 82); Sharp et al., 1994 (p. 88).

## 11. Encalyptaceae

- Encalypta vulgaris* Hedw. var. *mutica* Brid. State report(s): Whitehouse & McAllister, 1954; Magill, 1972; Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 55, figs. 1-4); Flowers, 1973 (p. 223); Watson & Richards, 1981 (p. 198); Sharp et al., 1994 (p. 421).

## 66. Entodonaceae

- Entodon challengerii* (Pars.) Card. (*Entodon compressus* C. Müll.). State report(s): Whitehouse & McAllister, 1954 (as *Entodon compressus*). Illustration(s): Conard, 1956 (p. 151, as *Entodon compressus*).
- Entodon cladorrhizans* (Hedw.) C. Müll. State report(s): Mahler, 1980.
- Entodon erythropus* Mitt. State report(s): Magill, 1976; Mahler, 1980.
- Entodon macropodus* (Hedw.) Müll. (*Entodon drummondii* (Hedw.) C. Müll.) State report(s): Whitehouse & McAllister, 1954 (as *Entodon drummondii*); Pursell & Reese, 1963; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983; Reese, 1984 (p. 213); Sharp et al., 1994 (p. 953).
- Entodon seductrix* (Hedw.) C. Müll. State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Pursell & Reese, 1963; Magill, 1972; Magill, 1974; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 149); Reese, 1984 (p. 213).
- Entodon sullivantii* (Müll.) Lindb. **Sullivant's entodon**. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Ranked G3G4 by NatureServe, January 2003. Element code: NBMUS2N070.

## 32. Ephemeraceae

- \**Ephemerum cohaerens* (Hedw.) Hampe (incl. var. *flotowianum* (Funck) Hampe). State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Mahler, 1980. Illustration(s): Smith, 1978 (p. 349); Reese, 1984 (p. 121).
- \**Ephemerum crassinervium* (Schwaegr.) C. Müll. var. *crassinervium* (incl. var. *papillosum* (Aust.) Ren. & Card. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Reese, 1984 (p. 121).
- \**Ephemerum crassinervium* (Schwaegr.) C. Müll. var. *texanum* (Grout) Bryan & Anderson (*Ephemerum spinulosum* var. *texanum* Grout). State report(s): Whitehouse & McAllister, 1954 (as *Ephemerum spinulosum* var. *texanum*); Magill, 1972; Mahler, 1980. Illustration(s): Reese, 1984 (p. 121). The type specimen of this taxon was collected in Bastrop Co. by McAllister (Bryan & Anderson, 1957).
- \**Ephemerum serratum* (Hedw.) Hampe. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Watson & Richards, 1981 (p. 258); Smith, 1978 (p. 349).
- \**Ephemerum spinulosum* Bruch & Schimp. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 33); Reese, 1984 (p. 121).
- \**Micromitrium wrightii* (C. Müll.) Crosby (*Ephemerum wrightii* C. Müll.). State report(s): BFNA, Dec 2002. Illustration(s): Reese, 1984 (p. 125).

## 29. Eropodiaceae

- Erpodium acrifolium* Pursell. State report(s): Redfearn, 1973; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 586).
- Erpodium domingense* (Spreng.) C. Müll. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Reese, 1984 (p. 152); Sharp et al., 1994 (p. 584).
- Venturiella sinensis* (Vent.) C. Müll. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980.

## 62. Fabroniaceae

- Fabronia ciliaris* (Brid.) Brid. var. *ciliaris* (incl. *Fabronia ciliaris* (Brid.) Brid. var. *ovata* Brid.; *Fabronia wrightii* Sull. var. *intermedia* Grout). State report(s): Whitehouse & McAllister, 1954; Prior, 1961, as var. *ciliata* and var. *ovata*; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Conard, 1956 (p. 137); Lawton, 1971 (pl. 137, figs. 1-4); Sharp et al., 1994 (p. 864).
- Fabronia ciliaris* (Brid.) Brid. var. *wrightii* (Sull.) Buck (*Fabronia wrightii* Sull. var. *wrightii*). State report(s): Whitehouse & McAllister, 1954 (as *Fabronia wrightii* var. *wrightii*); Prior, 1961 (as *Fabronia wrightii* var. *wrightii*); Pursell & Reese, 1963 (as *Fabronia wrightii* var. *wrightii*); Magill, 1976 (as *Fabronia wrightii* var. *wrightii*); Mahler, 1980 (as *Fabronia wrightii* var. *wrightii*).
- Fabronia gymnostoma* Sull. & Lesq. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. [\*\*Treated by Buck in Sharp et al. as synonym under *F. ciliaris* var. *ciliaris*.]
- Fabronia pusilla* Raddi. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 137, figs. 5-10); Sharp et al., 1994 (p. 862).

## 22. Fissidentaceae

- Fissidens adianthoides* Hedw. State report(s): Reese, 1984 ("eastern Texas"). Illustration(s): Reese, 1984 (p. 63).
- Fissidens bryoides* Hedw. var. *bryoides* (incl. *Fissidens exiguus* Sull.; *Fissidens falcatus* Red. & Card.; *Fissidens limbatus* Sull.; *Fissidens minutulus* Sull.; *Fissidens pusillus* (Wils.) Milde; *Fissidens repandus* Wils.); *Fissidens texanus* Lesq.; *Fissidens viridulus* (Sw.) Wahl.; *Fissidens viridulus* (Sw.) Wahl. var. *texanus* (Lesq.) Grout. State report(s): Whitehouse & McAllister, 1954 (as *Fissidens bryoides*, *Fissidens exiguus* and *Fissidens minutulus*); Pursell & Reese, 1963 (as *Fissidens minutulus* and *Fissidens pusillus*); Magill (as *Fissidens repandus*), 1976; Mahler, 1980; Redfearn, 1981; Reese,

1984. Illustration(s): Lawton, 1971 (pl. 12, figs. 1-9); Crum & Anderson, 1981 (p. 104 and 106); Watson & Richards, 1981 (p. 158); Reese, 1984 (p. 59, 61); Sharp et al., 1994 (p. 58).
- Fissidens bushii* (Card. & Thér.) Card. & Thér. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1976; Mahler, 1980; Reese, 1984. Illustration(s): Reese, 1984 (p. 65).
- \**Fissidens debilis* Schwaeger. State report(s): Whitehouse & McAllister, 1954; Prior, 1961; Pursell & Reese, 1963. [\*\*Check-- treated by Sharp et al. as synonym of *F. fontanus*.]
- Fissidens dubius* P. Beauv. (*Fissidens cristatus* Wils. ex Mitt., *Fissidens cristatus* var. *winonensis* (Ren. & Card.) Grout; see Karttunen, 1987). State report(s): Whitehouse & McAllister, 1954 (as *Fissidens cristatus* and *Fissidens cristatus* var. *winonensis* (Ren. & Card.) Grout); Magill, 1973 (as *Fissidens cristatus*); Mahler, 1980 (as *Fissidens cristatus*); Neumann, Rushing, Bazán & Mueller, 1983 (as *Fissidens cristatus*); Reese, 1984 (as *Fissidens cristatus*). Illustration(s): Conard, 1956 (p. 32, as *Fissidens cristatus*); Reese, 1984 (p. 61, as *Fissidens cristatus*); Sharp et al., 1994 (p. 42).
- Fissidens elegans* Brid. (*Fissidens ravenelii* Sull.). State report(s): Whitehouse & McAllister, 1954 (as *Fissidens ravenelii*); Pursell & Reese, 1963 (as *Fissidens ravenelii*); Mahler, 1980 (as *Fissidens ravenelii*); Neumann, Rushing, Bazán & Mueller, 1983 (as *Fissidens ravenelii*). Illustration(s): Reese, 1984 (p. 57, as *Fissidens ravenelii*); Sharp et al., 1994 (p. 52).
- Fissidens fontanus* (B.-Pyl.) Steud. State report(s): Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Lawton, 1971 (pl. 11, figs. 11-13); Reese, 1984 (p. 67); Sharp et al., 1994 (p. 81). A resident of springs. Should be unmistakable; see line drawings on p. 112 of Crum & Anderson (1981).
- Fissidens hallii* Aust. Hall's pocketmoss. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Reese, 1984 (p. 65). Ranked G2 by NatureServe, January 2003. Element code: NBMUS2WOHO.
- Fissidens hallianus* (Sull. & Lesq. ex Aust.) Mitt. State report(s): Redfearn, 1981.
- Fissidens minutus* Thwaites & Mitt. (*Fissidens garberi* Lesq. & James). State report(s): Whitehouse & McAllister, 1954 (as *Fissidens garberi*); Pursell & Reese, 1963 (as *Fissidens garberi*); Mahler, 1980 (as *Fissidens garberi*). Illustration(s): Reese, 1984 (p. 56, as *Fissidens garberi*); Sharp et al., 1994 (p. 54).
- Fissidens obtusifolius* Wils. var. *obtusifolius*. State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Prior, 1961; Pursell & Reese, 1963; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Lawton, 1971 (pl. 12, figs. 10-19); Reese, 1984 (p. 59); drawings of other vars. appear in Flowers, 1973 (p. 95 and p. 552).
- Fissidens obtusifolius* Wils. var. *apiculatus* Grout. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980; Redfearn, 1981.
- Fissidens polpodioides* Hedw. State report(s): Whitehouse & McAllister, 1954; Magill, 1974; Mahler, 1980. Illustration(s): Crum & Anderson, 1965; Reese, 1984 (p. 67); Sharp et al., 1994 (p. 35).
- Fissidens reesei* Crum & Anderson. State report(s): Mahler, 1980; Reese, 1984. Illustration(s): Reese, 1984 (p. 57).
- Fissidens subbasilaris* Hedw. State report(s): Pursell & Reese, 1963; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Reese, 1984 (p. 63); Sharp et al., 1994 (p. 41).
- Fissidens sublimbatus* Grout. State report(s): Whitehouse & McAllister, 1954; Magill, 1976. Illustration(s): Sharp et al., 1994 (p. 61).
- Fissidens taxifolius* Hedw. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1974; Mahler, 1980. Illustration(s): Conard, 1956 (p. 32); Lawton, 1971 (pl. 13, figs. 5-8); Watson & Richards, 1981 (p. 159); Reese, 1984 (p. 63); Sharp et al., 1994 (p. 41).

#### 65. Fontinalaceae

- Brachelyma subulatum* (P. Beauv.) Schimp. ex Card. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Reese, 1984 (p. 165).

- Dichelyma uncinatum* Mitt. State report(s): Specimen cited in NYBG database.
- Fontinalis filiformis* Sull. & Lesq. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Reese, 1984 (p. 165).
- Fontinalis hypnoides* C. J. Hartm. (*Fontinalis duriaei* Schimp.) State report(s): Whitehouse & McAllister, 1954 (as *Fontinalis duriaei*); Mahler, 1980. Illustration(s): Conard, 1956 (p. 135); Flowers, 1973 (p. 535, as *Fontinalis duriaei* and p. 537, as *Fontinalis hypnoides*).
- Fontinalis nova-angliae* Sull. State report(s): Magill, 1974; Magill, 1974; Mahler, 1980. Illustration(s): Reese, 1984 (p. 165).
- Fontinalis sullivantii* Lindb. (*Fontinalis disticha* Hook. & Wils.). State report(s): Reese, 1984 ("eastern Texas"). Illustration(s): Reese, 1984 (p. 165).

## 12. Funariaceae

- Aphanorrhagma serratum* (Hook. f. & Wils. in Drumm.) Sull. in Gray. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Conard, 1956 (p. 66); Reese (1984), p. 125.
- Entosthodon drummondii* Sull. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 95); Reese, 1984 (p. 129).
- Entosthodon sonorae* (Card.) Steere. State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 441). Endemic to southwestern North America (Magill, 1976).
- Funaria americana* Lindb. State report(s): Whitehouse & McAllister, 1954; Magill, 1972; Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 96); Lawton, 1971 (pl. 81, figs. 15-18); Sharp et al., 1994 (p. 435). Ranked G2G3 by NatureServe, January 2003. Element code: NBMUS2Z010.
- Funaria apiculatopilosa* Card. (*Funaria orcutti* Bartram). State report(s): Whitehouse & McAllister, 1954 (as *Funaria orcutti*); Magill, 1972; Magill, 1976; Mahler, 1980; Sharp et al., 1994 (p. 435).
- Funaria flavicans* Michx. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1973; Mahler, 1980. Illustration(s): Crum & Anderson, 1981 (p. 470); Reese (1984), p. 131.
- Funaria hygrometrica* Hedw. var. *hygrometrica*. State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Pursell & Reese, 1963; Magill, 1974; Magill, 1976; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 96); Lawton, 1971 (pl. 82, figs. 1-7); Flowers, 1973 (p. 305); Watson & Richards, 1981 (p. 255); Reese, 1984 (p. 131); Sharp et al., 1994 (p. 432 and 433).
- Funaria hygrometrica* Hedw. var. *calvescens* (Schwaegr.) Mont. (*Funaria calvescens* Schwaegr.). State report(s): Whitehouse & McAllister, 1954 (as *Funaria calvescens*); Prior, 1960 (as *Funaria calvescens*); Pursell & Reese, 1963; Magill, 1972; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 433, as *Funaria hygrometrica* var. *calvescens*).
- EXCLUDE?: *Funaria microstoma* B.S.G. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. According to Reese (1984, p. 133), this species does not occur in Texas; he cited the lack of a report in Fife (1979) as evidence that the Whitehouse & McAllister report was erroneous. Crum & Anderson (1981) excluded the species from eastern North America, referring reports to *Funaria flavicans*. However, *Funaria microstoma* does occur in the western US, e.g. Colorado (Fife, 1979).
- Funaria muehlenbergii* Hedw. f. ex Turn. (*Funaria calcarea* Wahl.). State report(s): Whitehouse & McAllister, 1954 (as *Funaria calcarea*); Mahler, 1980. Illustration(s): Flowers, 1973 (p. 305); Sharp et al., 1994 (p. 436).
- Funaria serrata* Brid. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Reese, 1984 (p. 133).
- EXCLUDE? *Physcomitrium acuminatum* (Schleich.) B.S.G. State report(s): Whitehouse & McAllister, 1954. \*\*\*Is this = *Physcomitrium eurystomum* Sendtn.? Note that NYBG has a specimen of *Physcomitrium eurystomum* from Texas: Wright s.n. What did Mahler do with this thing??
- Physcomitrium immersum* Sull. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980.

- Illustration(s): Conard, 1956 (p. 66); Lawton, 1971 (pl. 82, figs. 15-16); Reese, 1984 (p. 129).
- Physcomitrium pyriforme* (Hedw.) Hampe (*Physcomitrium drummondii* Britt.; *Physcomitrium kellermanii* Britt.; *Physcomitrium kellermani* Britt. var. *drummondii* (E. G. Britton) Grout). State report(s): Whitehouse & McAllister, 1954 (as *Physcomitrium kellermani* and *Physcomitrium kellermani* var. *drummondii*); Pursell & Reese, 1963; Magill, 1972; Magill, 1973; Magill, 1974; Magill, 1976; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 95); Lawton, 1971 (pl. 83, figs. 1-7, as *Physcomitrium kellermanii*); Flowers, 1973 (p. 313); Watson & Richards, 1981 (p. 257); Reese, 1984 (p. 129); Sharp et al., 1994 (p. 430). [\*\*Check into this: Magill (1972) reported this as *P. pyriforme* (Hedw.) De Not. var. *serratum* (Ren. & Card.) Crum & Anderson.]
- Physcomitrium turbinatum* (Michx.) Brid. State report(s): Whitehouse & McAllister, 1954. \*\*Status unclear; has this been lumped under *Physcomitrium pyriforme*? Note that *Physcomitrium turbinatum* C. Muell. ex Lesq. & James IS synonymous, but *Physcomitrium turbinatum* (Michx.) Britt. [sic; Whitehouse was probably wrong about the "Brid."] is not (Crum & Anderson, 1981).
- Physcomitrium turbinatum* (Michx.) Brid. var. *langloisii* (Ren. & Card.) E. G. Britton. State report(s): Whitehouse & McAllister, 1954. \*\*Status unclear; has this been lumped under *Physcomitrium pyriforme*?
- Pyramidula tetragona* (Brid.) Brid. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 64); Reese, 1984 (p. 131).

#### 14. Gigaspermaceae

- Lorentziella imbricata* (Mitt.) Broth. (*Acaulon megalosporum* Grout; *Acaulon runyonii* Grout). State report(s): Lawton, 1953; Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Lawton, 1953; Reese, 1984 (p. 116); Sharp et al., 1994 (p. 425). This species occurs in south Texas and Argentina, Paraguay and Uruguay (Crum & Anderson, 1981). In Texas it is known from Granite Mountain in Burnet Co., on or near Enchanted Rock in Llano Co., near Olmito in Cameron Co., and from nondescript sites in Bastrop and Travis counties (Lawton, 1953).

#### 15. Grimmiaceae

- \**Coscinodon calyptratus* (Hooker) C. E. O. Jensen (*Grimmia calyptrata* Hooker). State report(s): Magill, 1974 (as *Grimmia calyptrata*); Mahler, 1980 (as *Grimmia calyptrata*). Illustration(s): Lawton, 1971 (pl. 56, figs. 1-9, as *Grimmia calyptrata*); Flowers, 1973 (p. 246, as *Grimmia calyptrata*).
- \**Coscinodon cribrosus* (Hedwig) Spruce (*Grimmia cribrosa* Hedwig). State report(s): Magill, 1976; Mahler, 1980; Ireland & Crum, 1976.
- Grimmia affinis* Hoppe & Hornsch. ex Hornsch. State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 56, figs. 10-16); Sharp et al., 1994 (p. 399).
- Grimmia americana* Bartram (*Grimmia involucrata* Card.). State report(s): Bartram, 1929; Whitehouse & McAllister, 1954 (as *Grimmia involucrata*); Mahler, 1980. Illustration(s): Bartram, 1929. The type specimen, C. R. Orcutt 7082, is from Jeff Davis Co. (Bartram, 1929).
- Grimmia apocarpa* (Hedw.) B.S.G. var. *apocarpa* (*Schistidium apocarpum* (Hedw.) Brush & Schimp.). State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Conard, 1956 (p. 81); Lawton, 1971 (pl. 68, figs. 1-8); Flowers, 1973 (p. 235, as *Grimmia apocarpa*); Watson & Richards, 1981 (p. 237, as *Schistidium apocarpum*); Reese, 1984 (p. 121); Sharp et al., 1994 (p. 391).
- Grimmia apocarpa* (Hedw.) B.S.G. var. *alpicola* (Hedw.) Hartm. (*Grimmia alpicola* Hedw.). State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Magill, 1976 (as *Grimmia alpicola*); Mahler, 1980 (as *Grimmia alpicola*). Illustration(s): Lawton, 1971 (pl. 67, figs. 1-6, as *Grimmia alpicola* var. *alpicola*); Flowers, 1973 (p. 241, *Grimmia alpicola*).

- Grimmia apocarpa* (Hedw.) B.S.G. var. *stricta* (Turn.) Mitt. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 68, figs. 15-19).
- Grimmia arizonae* Ren. & Card. State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 401).
- EXCLUDE: *Grimmia donniana* Smith. State report(s): Whitehouse & McAllister, 1954. Lawton (1971) suggested that specimens from Texas were misidentified; not included by Mahler; see p. 53.
- Grimmia laevigata* (Brid.) Brid. State report(s): Whitehouse & McAllister, 1954; Magill, 1974; Mahler, 1980. Illustration(s): Conard, 1956 (p. 82); Lawton, 1971 (pl. 61, figs. 1-9); Flowers, 1973 (p. 252); Reese, 1984 (p. 121); Sharp et al., 1994 (p. 393).
- Grimmia ovalis* (Hedw.) Lindb. (incl. forma *affinis* (Hornsch.) G. N. Jones; *Grimmia affinis* Hornsch.) State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 82); Lawton, 1971 (pl. 63, figs. 1-8); Flowers, 1973 (p. 252); Sharp et al., 1994 (p. 394).
- Grimmia pulvinata* (Hedw.) Sm. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 64, figs. 1-8). Illustration(s): Flowers, 1973 (p. 260); Watson & Richards, 1981 (p. 240 and 241); Sharp et al., 1994 (p. 402).
- Jaffuelobryum raii* (Austin) Thér. (*Grimmia raii* Thér.). State report(s): Whitehouse & McAllister, 1954 (as *Grimmia raii*); Prior, 1961 (as *Grimmia raii*); Mahler, 1980 (as *Grimmia raii*); Redfearn, 1981 (as *Grimmia raii*). Illustration(s): Conard, 1956 (p. 82, as *Grimmia raii*); Flowers, 1973 (p. 247, as *Grimmia raii*).
- Jaffuelobryum wrightii* (Sull.) Thér. (*Grimmia wrightii* (Sull. in Gray) Aust.). State report(s): Whitehouse & McAllister, 1954 (as *Grimmia wrightii*); Magill, 1976 (as *Grimmia wrightii*); Mahler, 1980 (as *Grimmia wrightii*); Redfearn, 1981 (as *Grimmia wrightii*). Illustration(s): Lawton, 1971 (pl. 56, figs. 17-19, as *Grimmia wrightii*); Sharp et al., 1994 (p. 388, as *Grimmia wrightii*).
- Racomitrium heterostichum* (Hedw.) Brid. var. *sudeticum* (Funck) Jones (*Racomitrium sudeticum* (Funck) B.S.P.). State report(s): Whitehouse & McAllister, 1954. Illustration(s): Lawton, 1971 (pl. 77, figs. 1-4, as *Racomitrium sudeticum*); Watson & Richards, 1981 (p. 248).

### 38. Hedwigiaceae

- Braunia secunda* (Hook.) B.S.G. State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 666).
- Hedwigia ciliata* (Hedw.) P. Beauv. State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Magill, 1973; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Conard, 1956 (p. 45); Lawton, 1971 (pl. 129, figs. 6-14); Watson & Richards, 1981 (p. 314); Reese, 1984 (p. 161); Sharp et al., 1994 (p. 664).

### 69. Hypnaceae

- Ctenidium molluscum* (Hedw.) Mitt. (*Hypnum molluscum* Hedw.) State report(s): Whitehouse & McAllister, 1954 (as *Hypnum molluscum*); Magill, 1974; Mahler, 1980. Illustration(s): Conard, 1956 (p. 146, as *Hypnum molluscum*); Watson & Richards, 1981 (p. 392 and 393); Reese, 1984 (p. 228, as *Ctenidium molluscum*).
- Herzogiella turfacea* (Lindb.) Iwats. (*Isopterygium turfaceum* (Lindb.) Lindb.; *Plagiothecium turfaceum* (Lindb.) Lindb.). State report(s): Whitehouse & McAllister, 1954 (as *Plagiothecium turfaceum*); Prior, 1960 (as *Plagiothecium turfaceum*); Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 180, figs. 1-11, as *Isopterygium turfaceum*).
- \**Hypnum cupressiforme* Hedw. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 148); Lawton, 1971 (pl. 191, figs. 6-10); Watson & Richards, 1981 (p. 390); Sharp et al., 1994 (p. 1041).
- \**Hypnum curvifolium* Hedw. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Neumann,

- Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 147); Reese, 1984 (p. 225).
- \**Hypnum imponens* Hedw. State report(s): Specimen cited on NYBG website. Illustration(s): Reese, 1984 (p. 225).
- \**Hypnum lindbergii* Mitt. (incl. var. *americanum* (Ren. & Card.) Whitehouse; *Hypnum patientae* Lindb.). State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963 (as *Hypnum patientae*); Mahler, 1980. Note that Schofield (2002), in a draft treatment of the genus for BFNA, reported seeing no voucher specimens from Texas. Illustration(s): Conard, 1956 (p. 145, as *Hypnum patientae*); Lawton, 1971 (pl. 190, figs. 1-9); Flowers, 1973 (p. 519, as *Hypnum lindbergii*); Reese, 1984 (p. 225, as *Hypnum lindbergii*).
- \**Hypnum revolutum* (Mitt.) Lindb. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 146); Lawton, 1971 (pl. 192, figs. 8-9); Flowers, 1973 (p. 515); Sharp et al., 1994 (p. 1040).
- \**Hypnum vaucheri* Lesq. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 148); Lawton, 1971 (pl. 191, figs. 11-14); Flowers, 1973 (p. 517); Sharp et al., 1994 (p. 1043).
- Isopterygium tenerum* (Sw.) Mitt. (*Plagiothecium micans* (Sw.) Par. var. *micans*; *Plagiothecium micans* (Sw.) Par. var. *minus*; *Plagiothecium micans* (Sw.) Par. var. *fulvum* (Hook. & Wils.) Par.). State report(s): Whitehouse & McAllister, 1954 (as several vars. of *Plagiothecia micans*); Magill, 1974; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983; Redfearn, 1981. Illustration(s): Conard, 1956 (p. 154, as *Plagiothecium micans*); Reese, 1984 (p. 225, as *Isopterygium tenerum*).
- \**Platydictya confervoides* (Brid.) Crum (*Amblystegiella confervoides* (Brid.) Loesk.; *Hypnum confervoides* Brid.). State report(s): Mahler, 1980. Illustration(s): Reese, 1984 (p. 221, as *Platydictya confervoides*).
- \**Platygyrium fuscoluteum* Card. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 1011).
- \**Platygyrium repens* (Brid.) Schimp. in B.S.G. State report(s): Whitehouse & McAllister, 1954; Magill, 1974; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 139); Flowers, 1973 (p. 527); Reese, 1984 (p. 221).
- Pseudotaxiphyllum homomallifolium* (Redfearn) Ireland (*Isopterygium homomallifolium* Redfearn). State report(s): Redfearn, 1973 (as *Isopterygium homomallifolium*, sp. nov.); Mahler, 1980 (as *Isopterygium homomallifolium*). Illustration(s): Redfearn, 1973 (as *Isopterygium homomallifolium*); Sharp et al., 1994 (p. 1033). Once thought to be endemic to central Texas (Mahler, 1980); now known also from Arizona, southern New Mexico and Sonora (Sharp et al., 1994).
- Pylaisiella polyantha* (Hedw.) Grout (*Pylaisia polyantha* (Hedw.) B.S.G.; *Pylaisia subdenticulata* B.S.G.). State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 150); Lawton, 1971 (pl. 193, figs. 1-3); Sharp et al., 1994 (p. 1015).
- Taxiphyllum deplanatum* (Bruch & Schimp.) Fleisch. (*Plagiothecium deplanatum* (C. Müll.) Spruce. State report(s): Whitehouse & McAllister, 1954 (as *Plagiothecium deplanatum*); Mahler, 1980. Illustration(s): Conard, 1956 (p. 154, as *Plagiothecium deplanatum*); Sharp et al., 1994 (p. 1026, as *Taxiphyllum deplanatum*).
- Taxiphyllum taxirameum* (Mitt.) Fleisch. (*Plagiothecium geophilum* (Aust.) Grout; *Plagiothecium planissimum* (Mitt.) Bartram). State report(s): Whitehouse & McAllister, 1954 (as *Plagiothecium geophilum* and *Plagiothecium planissimum*); Pursell & Reese, 1963 (as *Plagiothecium planissimum*); Redfearn, 1981; Mahler, 1980. Illustration(s): Conard, 1956 (p. 153, as *Plagiothecium geophilum*); Reese, 1984 (p. 228, as *Taxiphyllum taxirameum*); Sharp et al., 1994 (p. 1024, as *Taxiphyllum taxirameum*).

## 75. Leptodontaceae

- \**Forsstroemia trichomitria* (Hedw.) Lindb. (incl. var. *immersa* (Sull. & Lesq.) Lesq. & James; *Leptodon*

trichomitrius (Hedw.) Sull. & Lesq.). State report(s): Whitehouse & McAllister, 1954 (p. 131); Pursell & Reese, 1963; ; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 118, as *Leptodon trichomitrius*); Reese, 1984 (p. 171); Sharp et al., 1994 (p. 679, as *Forsstroemia trichomitria*).

#### 55. Leskeaceae

- Claopodium whippleanum* (Sull.) Renauld & Cardot. State report(s): Specimen cited in NYBG database (Hinckley s.n., from Madera Canyon). Illustration(s): Conard, 1956 (p. 105); Lawton, 1971 (pl. 143, figs. 9-11); Sharp et al., 1994 (p. 860).
- Haplocladium microphyllum* (Hedw.) Broth. (*Bryohaplocladium microphyllum* (Hedw.) Wat. & Iwats.). State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983; Redfearn, 1981. Illustration(s): Reese, 1984 (p. 199); Sharp et al., 1994 (p. 858).
- Leskea australis* Sharp. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Reese, 1984 (p. 191).
- Leskea gracilescens* Hedw. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 108). Illustration(s): Reese, 1984 (p. 191).
- Leskea obscura* Hedw. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Reese, 1984 (p. 191).
- Leskea polycarpa* Hedw. (*Leskea arenicola* Best). State report(s): Reese, 1961 (as *Leskea arenicola*); Mahler, 1980. Illustration(s): Reese, 1984 (p. 191, as *Leskea polycarpa*).
- \**Lindbergia brachyptera* (Mitt.) Kindb. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 105); Reese, 1984 (p. 191); Sharp et al., 1994 (p. 857).
- \**Lindbergia mexicana* (Besch.) Card. (*Leskea mexicana* Besch.). State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980; Sharp et al., 1994 (p. 856).

#### 72. Leucodontaceae

- \**Leucodon brachypus* (*Fissidens scurioides* var. *vaginans* Michx.). State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 136).
- \**Leucodon julaceus* (Hedw.) Sull. State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Pursell & Reese, 1963; Magill, 1972; Magill, 1973; Magill, 1974; Mahler, 1980; Redfearn, 1981; Neumann, Rushing, Bazán & Mueller, 1983; Reese, 1984 (p. 171); Sharp et al., 1994 (p. 672).

#### 33.5 Leucophanaceae

- \**Octoblepharum albidum* Hedw. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 26); Reese, 1984 (p. 93); Sharp et al., 1994 (p. 184). On bases of trees and rotten logs.

#### 25. Lycopryaceae

- \**Leucobryum albidum* (Brid. ex P. Beauv.) Lindb. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1973; Magill, 1974; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Reese, 1984 (p. 88); Sharp et al., 1994 (p. 176).
- Leucobryum antillarum* Schimp. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Excluded from the flora of North America in BFNA, 2002; apparently reports were based on misidentifications. However, authors as recent as Peterson in Sharp et al. (1994) accept the species for the southeastern

U.S. Illustration(s): Sharp et al., 1994 (p. 177).

\**Leucobryum glaucum* (Hedw.) Ångstr. in Fries State report(s): Whitehouse & McAllister, 1954. Illustration(s): Conard, 1956 (p. 27); Watson & Richards, 1981 (p. 196 and 197).

#### 44. Mniaceae

*Plagiomnium ciliare* (C. Müll.) Koponen (*Mnium affine* Bland. ex Funck; *Mnium ciliare* (C. Müll.) Schimp.). State report(s): Whitehouse & McAllister, 1954 (as *Mnium affine*); Pursell & Reese, 1963 (as *Mnium affine*); Magill, 1974 (as *Mnium affine*); Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983 (as *Mnium affine*). Illustration(s): Lawton, 1971 (pl. 106, figs. 1-5); Flowers, 1973 (p. 395, as *Mnium affine*); Reese, 1984 (p. 138, as *Mnium affine*).

*Plagiomnium cuspidatum* (Hedw.) Koponen (*Mnium cuspidatum* Hedw.). State report(s): Whitehouse & McAllister, 1954 (as *Mnium cuspidatum*); Mahler, 1980. Illustration(s): Conard, 1956 (p. 91, as *Mnium cuspidatum*); Lawton, 1971 (pl. 106, figs. 6-10); Flowers, 1973 (p. 397, as *Mnium cuspidatum*); Reese, 1984 (p. 142, as *Mnium cuspidatum*); Sharp et al., 1994 (p. 532, as *Plagiomnium cuspidatum*).

*Plagiomnium punctatum* (Hedw.) Koponen. (*Mnium punctatum* Hedw. var. *punctatum*). State report(s): Pursell & Reese, 1963 (as *Mnium punctatum*); Mahler, 1980. Illustration(s): Conard, 1956 (p. 91, as *Mnium punctatum*); Flowers, 1973 (p. 397, as *Mnium punctatum*).

*Plagiomnium rostratum* (Schrad.) Koponen (*Mnium longirostre* Brid.). State report(s): Pursell & Reese, 1963 (as *Mnium longirostre*); Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 534).

*Plagiomenium rugicum* (Laur.) Koponen (*Mnium rugicum* Laur.). State report(s): Mahler, 1980.

#### 61. Myriniaceae

*Schwetschkeopsis denticulata* (Sull.) Broth. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 102); Reese, 1984 (p. 186).

#### 74. Neckeraceae

*Neckeropsis undulata* (Hedw.) Reich. (*Neckera undulata* Hedw.). State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Reese, 1984 (p. 177); Sharp et al., 1994 (p. 744).

#### 37. Orthotrichaceae

*Orthotrichum anomalum* Hedw. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 49); Vitt, 1973 (pl. 24, figs. 190-196); Lawton, 1971 (pl. 119, figs. 16-21); Flowers, 1973 (p. 287); Watson & Richards, 1981 (p. 305); Sharp et al., 1994 (p. 610).

*Orthotrichum cupulatum* Brid. (*Orthotrichum texanum* of Texas auth., at least per Mahler, 1980). State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Vitt, 1973 (pl. 25, figs. 197-203); Lawton, 1971 (pl. 120, figs. 5-10); Flowers, 1973 (p. 280); Sharp et al., 1994 (p. 611).

*Orthotrichum diaphanum* Brid. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1972; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Vitt, 1973 (pl. 20, figs. 155-161); Watson & Richards, 1981 (p. 308); Reese, 1984 (p. 157); Sharp et al., 1994 (p. 616).

*Orthotrichum lyellii* Hook. & Tayl. (incl. var. *papillosum* (Hampe) Lesq. & James). State report(s): Whitehouse & McAllister, 1954. Illustration(s): Conard, 1956 (p. 47); Vitt, 1973 (pl. 1, figs. 1-9); Lawton, 1971 (pl. 122, figs. 1-8); Watson & Richards, 1981 (p. 307); Sharp et al., 1994 (p. 603).

*Orthotrichum obtusifolium* Brid. State report(s): Magill, 1973; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 122, figs. 15-24).

- Orthotrichum pumilum* Sw. State report(s): Whitehouse & McAllister, 1954; Magill, 1972; Magill, 1973; Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 50); Lawton, 1971 (pl. 123, figs. 11-16).
- Orthotrichum pusillum* Mitt. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Vitt, 1973 (pl. 23, figs. 181-189); Reese, 1984 (p. 157).
- Orthotrichum pycnophyllum* Schimp. ex C. Müll. (*Orthotrichum elegans* Schwaegr. ex Hook & Grev.; *Orthotrichum speciosum* Nees var. *elegans* (Schwaegr. ex Hook. & Grev.) Warnst.-- at least of Texas auth.). State report(s): Whitehouse & McAllister, 1954 (as *Orthotrichum elegans*); Magill, 1972 (as *Orthotrichum speciosum* var. *elegans*); Magill, 1973; Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 48, as *Orthotrichum elegans*); Vitt, 1973 (pl. 35, figs. 283-286); Sharp et al., 1994 (p. 606).
- Orthotrichum rupestre* (Brid.) Schwaegr. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Vitt, 1973 (pl. 10, figs. 72-77); Lawton, 1971 (pl. 124, figs. 1-8); Sharp et al., 1994 (p. 607).
- Orthotrichum strangulatum* P. Beauv. f. *strangulatum*. State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Mahler, 1980; Redfearn, 1981. Illustration(s): Vitt, 1973 (pl. 26, figs. 205-215).
- Orthotrichum strangulatum* P. Beauv. f. *lescurii* (*Orthotrichum lescurii* Aust. of some Texas auth.). State report(s): Whitehouse & McAllister, 1954. Illustration(s): Flowers, 1973 (p. 287); Vitt, 1973 (pl. 26, fig. 204).
- Schlotheimia rugifolia* (Hook.) Schwaegr. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): ; Reese, 1984 (p. 161); Sharp et al., 1994 (p. 654).

#### 64. Plagiotheciaceae

- Plagiothecium denticulatum* (Hedw.) B.S.G. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Conard, 1956 (p. 153); Lawton, 1971 (pl. 181, figs. 1-8); Flowers, 1973 (p. 525); Watson & Richards, 1981 (p. 385).

#### 8. Polytrichaceae

- Atrichum altecristatum* (Ren. & Card.) Smyth & Smyth. (*Atrichum undulatum* var. *altecristatum* Ren. & Card.) Whitehouse & McAllister, 1954 (as *Atrichum undulatum* var. *altecristatum*); Mahler, 1980 (as *Atrichum undulatum* var. *altecristatum*).
- Atrichum angustatum* (Brid.) B.S.G. (*Atrichum xanthopelma* (C. Müll.) Jaeg.). State report(s): Whitehouse & McAllister, 1954 (as *Atrichum xanthopelma*); Pursell & Reese, 1963; Magill, 1973; Mahler, 1980; Redfearn, 1981; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 35); Reese, 1984 (p. 231).
- Atrichum crispum* (James) Sull. var. *molle* (Holz.) Frye. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980.
- Atrichum undulatum* (Hedw.) P. Beauv. var. *undulatum*. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1972; Magill, 1974; Mahler, 1980. Illustration(s): Conard, 1956 (p. 35); Watson & Richards, 1981 (p. 141); Reese, 1984 (p. 231).
- Atrichum undulatum* (Hedw.) P. Beauv. var. *minus* (Lam. & DC.) Web. & Mohr. State report(s): Whitehouse & McAllister, 1954. [Var. not mentioned by Mahler.]
- Pogonatum brachyphyllum* (Michx.) Beauv. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1973; Mahler, 1980; Redfearn, 1981; Neumann, Rushing, Bazán & Mueller, 1983; Reese, 1984 (p. 231).
- Pogonatum pensylvanicum* (Hedw.) Paris. State report(s): Magill, 1974; Mahler, 1980. Illustration(s): Reese, 1984 (p. 231); Sharp et al., 1994 (p. 1086).
- Polytrichum commune* Hedw. State report(s): Whitehouse & McAllister, 1954; Magill, 1973; Mahler, 1980;.

Illustration(s): Conard, 1956 (p. 38); Lawton, 1971 (pl. 9, fig. 15.); Flowers, 1973 (p. 549); Watson & Richards, 1981 (p. 153); Reese, 1984 (p. 231); Sharp et al., 1994 (p. 1075).  
Polytrichum ohioense Ren. & Card. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Illustration(s): Conard, 1956 (p. 38).

### 31. Pottiaceae

- \*Acaulon muticum (Hedw.) C. Müll. var. muticum. State report(s): Reese, 1984; BFNA, 2002. Illustration(s): Reese, 1984 (p. 111).
- \*Acaulon muticum (Hedw.) C. Müll. var. rufescens (Jaeg.) Crum. (Acaulon rufescens Jaeg.) State report(s): Whitehouse & McAllister, 1954 (as Acaulon rufescens Jaeg.); Magill, 1974; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Reese, 1984 (p. 111).
- \*Acaulon schimperianum (Sull.) Sull. State report(s): Whitehouse & McAllister, 1954; Crum & Anderson, 1965; Magill, 1976; Mahler, 1980. Illustration(s): Crum & Anderson, 1965; Sharp et al., 1994 (p. 382).
- \*Acaulon triquetrum (Spruce) C. Müll. (Phascum triquetrum Spruce). State report(s): BFNA, 2002.
- \*Aloina hamulus (C. Müll.) Broth. (Barbula hamulus C. Müll.). State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Delgadillo, 1975; Reese, 1984 (p. 111); Sharp et al., 1994 (p. 364).
- \*Aloina rigida (Hedw.) Limpricht (Barbula rigida Hedw.). State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 36, figs. 8-10); Delgadillo, 1975; Sharp et al., 1994 (p. 366).
- Astomum ludovicianum (Sull.) Sull. (Weissia ludovicianum (Sull.) Kindb.) State report(s): Whitehouse & McAllister, 1954 (p. 77); Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Reese, 1984 (p. 100).
- Astomum muhlenbergianum (Sw.) Grout (Weissia muhlenbergianum (Sw.) Reese & Lemmon). State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1973; Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 51); Reese, 1984 (p. 100).
- Astomum phascoides (Hook. ex Drumm.) Grout (Weissia rostellata (Brid.) Lindb. var. phascoides (Hook.) Reese & Lemmon). Considered by some to be a hybrid; see Magill (1976) and Crum and Anderson (1981). State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Crum & Anderson, 1981 (p. 291); Reese, 1984 (p. 100). Ranked G3G4 by NatureServe, January 2003. Element code: NBMUS0K030.
- \*Barbula bolleana (J.K.A. Müller) Brotherus (Barbula ehrenbergii (Lor.) Fleisch.). State report(s): Whitehouse & McAllister, 1954 (as Barbula ehrenbergii); Pursell & Reese, 1963 (as Barbula ehrenbergii); Mahler, 1980 (as Barbula ehrenbergii); Redfearn, 1981 (as Barbula ehrenbergii). Illustration(s): Flowers, 1973 (p. 158, as Barbula ehrenbergii).
- \*Barbula convoluta Hedw. var. eustegia (Card. & Thér.) Zander (Barbula eustegia Card & Thér.; Barbula chrysopoda C. Müll. & Kind.; Barbula whitehouseae Crum). State report(s): Crum, 1956 (as Barbula whitehouseae); Mahler, 1980 (as Barbula whitehouseae). Illustration(s): Lawton, 1971 (pl. 37, figs. 15-20, as Barbula eustegia); Flowers, 1973 (p. 155, as Barbula eustegia); Watson & Richards, 1981 (p. 217); Sharp et al., 1994 (p. 293). In January 2003, Barbula eustegia was ranked G1G3 by NatureServe, Element code: NBMUS0Q090.
- \*Barbula indica (Hook.) Spreng. var. indica (Barbula cruegeri Sond ex C. Müll.; Barbula cancellata C. Müll.) State report(s): Whitehouse & McAllister, 1954 (as Barbula cruegeri); Pursell & Reese, 1963 (as Barbula cruegeri); Magill, 1973 (as Barbula cancellata); Mahler, 1980 (as Barbula cancellata); Redfearn, 1981 (as Barbula cancellata). Illustration(s): Flowers, 1973 (p. 153, as Barbula cruegeri); Reese, 1984 (p. 111); Sharp et al., 1994 (p. 291, as Barbula indica).
- \*Barbula unguiculata Hedw. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980; Redfearn, 1981. (Conard, 1956 (p. 60); Flowers, 1973 (p. 154)); Watson & Richards, 1981 (p. 218); Reese, 1984 (p. 111); Sharp et al., 1994 (p. 290).
- Bryoerythrophyllum recurvirostrum (Hedw.) Chen. var. recurvirostrum. (Didymodon recurvirostris (Hedw.) Jenn.) State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980; Redfearn, 1981.

- Illustration(s): Flowers, 1973 (p. 148); Sharp et al., 1994 (p. 275).
- \**Crossidium aberrans* Holz. & Bartram. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 40, figs. 1-8); Flowers, 1973 (p. 180).
- \**Crossidium crassinerve* (De Not.) Jur. var. *crassinerve* (*Crossidium desertorum* Holz. & Bartram). State report(s): Whitehouse & McAllister, 1954 (as *Crossidium desertorum*); Magill, 1976 (as *Crossidium desertorum*); Mahler, 1980. Illustration(s): Flowers, 1973 (p. 183, as *Crossidium desertorum*); Delgadillo, 1975; Reese, 1984 (p. 111); Sharp et al., 1994 (p. 367).
- Desmatodon convolutus* (Brid.) Grout. State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Flowers, 1973 (p. 195); Sharp et al., 1994 (p. 358).
- Desmatodon guepini* B.S.G. (*Tortula guepini* (B.S.G.) Broth.). State report(s): Pursell & Reese, 1963; Magill, 1976; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 360).
- Desmatodon latifolius* (Hedw.) Brid. State report(s): Specimen cited in NYBG database. Illustration(s): Lawton, 1971 (pl. 41, figs. 1-6); Flowers, 1973 (p. 187).
- \**Didymodon australasiae* (Hook. & Grev.) Zander (*Trichostomopsis australasiae* (Hook. & Grev.) Robins.; *Trichostomopsis brevifolia* Bartram; *Husnotiella torquescens* (Card.) Bartram). State report(s): Whitehouse & McAllister, 1954 (as *Husnotiella torquescens*); Magill, 1976 (as *Husnotiella torquescens* and *Trichostomopsis australasiae*); Mahler, 1980 (as *Husnotiella torquescens* and *Trichostomopsis australasiae*). Illustration(s): Lawton, 1971 (pl. 51, figs. 12-20, as *Trichostomopsis australasiae*); Sharp et al., 1994 (p. 308).
- \**Didymodon fallax* (Hedw.) Zander (*Barbula fallax* Hedw.). State report(s): Magill, 1972 (as *Barbula fallax*); Magill, 1976 (as *Barbula fallax*); Mahler, 1980 (as *Barbula fallax*). Illustration(s): Conard, 1956 (p. 60); Lawton, 1971 (pl. 37, figs. 21-23, as *Barbula fallax*); Flowers, 1973 (p. 158); Watson & Richards, 1981 (p. 220, as *Barbula fallax*); Reese, 1984 (p. 108, as *Barbula fallax*); Sharp et al., 1994 (p. 311, as *Didymodon fallax*).
- \**Didymodon nevadensis* Zander. State report(s): BFNA, 2002. Only recently described; see Zander, Stark & Marrs-Smith, 1995.
- \**Didymodon revolutus* (Card.) Williams (*Husnotiella revoluta* Card.). State report(s): Whitehouse & McAllister, 1954 (as *Husnotiella revoluta*); Magill, 1972 (as *Husnotiella revoluta*); Magill, 1976 (as *Husnotiella revoluta*); Mahler, 1980 (as *Husnotiella revoluta*); Reese, 1984 (p. 105, as *Husnotiella revoluta*); Sharp et al., 1994 (p. 307, as *Didymodon revolutus*).
- \**Didymodon rigidulus* Hedw. var. *rigidulus*. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 42, figs. 29); Flowers, 1973 (p. 133); Sharp et al., 1994 (p. 306, as *Didymodon rigidulus* Hedw. var. *rigidulus*).
- \**Didymodon rigidulus* Hedw. var. *subulatus* (Thér. & Bartram) Zander (*Didymodon mexicanus* Besch. var. *subulatus* Thér. & Bartram). State report(s): Whitehouse & McAllister, 1954 (as *Didymodon mexicanus* var. *subulatus*); Magill, 1976 (as *Didymodon mexicanus* var. *subulatus*); Mahler, 1980 (as *Didymodon mexicanus* var. *subulatus*); Sharp et al., 1994 (p. 306, as *Didymodon rigidulus* Hedw. var. *subulatus*).
- \**Didymodon rigidulus* Hedw. var. *gracilis* (Schleich. ex Hook. & Grev.) Zand. (*Barbula acuta* (Brid.) Brid. var. *acuta*; *Barbula acuta* var. *bescherellei* (Sauerb. ex Jaeg. & Sauerb.) Crum; *Barbula bescherelei* Sauerb.). State report(s): Whitehouse & McAllister, 1954 (as *Barbula bescherelei*); Magill, 1976 (as *Barbula acuta* var. *bescherellei*); Mahler, 1980 (as *Barbula acuta* var. *bescherellei*); Redfearn, 1981 (as *Barbula acuta* var. *bescherellei*). Illustration(s): Lawton, 1971 (pl. 37, figs. 1-5, as *Barbula acuta*); Flowers, 1973 (p. 153, as *Barbula bescherelei* and p. 159, as *Barbula acuta*).
- \**Didymodon rigidulus* Hedw. var. *icmadophilus* (C. Müll.) Zander (*Barbula icmadophilus* C. Müll.). State report(s): BFNA, 2002. Illustration(s): Lawton, 1971 (pl. 38, figs. 6-11, as *Barbula icmadophilus*).
- \**Didymodon tophaceus* (Brid.) Jur. (*Trichostomum tophaceum* Brid.; *Husnotiella pringlei* (Card.) Grout; *Barbula tophaceus* (Brid.) Mitt.). State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Conard, 1956 (p. 59); Lawton, 1971 (pl. 42, figs. 22-28); Flowers, 1973 (p. 145); Reese, 1984 (p. 108, as *Barbula tophacea*); Sharp et

- al., 1994 (p. 315).
- \**Didymodon umbrosus* (J.K.A. Müll.) Zander (*Didymodon australasiae* (Hook. & Grev.) Zander var. *umbrosus* (J.K.A. Müll.) Zander). State report(s): BFNA, 2002. Illustration(s): Sharp et al., 1994 (p. 309, as *Didymodon australasiae* var. *umbrosus*).
- Eucladium verticillatum* (Brid.) Bruch & Schimp. in B.S.G. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980; Redfearn, 1981. Illustration(s): Lawton, 1971 (pl. 43, figs. 1-4); Flowers, 1973 (p. 133); Watson & Richards, 1981 (p. 226); Reese, 1984 (p. 105); Sharp et al., 1994 (p. 247).
- \**Globulinella globifera* (Hampe) Steere (*Seligeria globifera* Hampe). State report(s): Magill, 1976; Mahler, 1980; Sharp et al., 1994 (p. 361).
- Gymnostomum aeruginosum* Smith. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Lawton, 1971 (pl. 43, figs. 5-8); Flowers, 1973 (p. 130); Watson & Richards, 1981 (p. 225); Reese, 1984 (p. 105); Sharp et al., 1984 (p. 248).
- Gymnostomum calcareum* Nees & Hornsch. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Redfearn, 1981. [\*\*Zander in Sharp et al. 1994 places this in synonymy under *G. aeruginosum*.]
- Hymenostylium recurvirostrum* (Hedw.) Dix. (*Gymnostomum recurvirostre* Hedw.) State report(s): Whitehouse & McAllister, 1954 (as *Gymnostomum recurvirostre*); Pursell & Reese, 1963; Magill, 1976 (as *Gymnostomum recurvirostre*); Mahler, 1980 (as *Gymnostomum recurvirostre*); Redfearn, 1981 (as *Gymnostomum recurvirostre*). Illustration(s): Conard, 1956 (p. 62); Lawton, 1971 (pl. 43, figs. 9-11, as *Gymnostomum recurvirostre*); Flowers, 1973 (p. 130, as *Gymnostomum recurvirostrum*); Sharp et al., 1994 (p. 252).
- \**Hyophila involuta* (Hook.) Jaeg. & Sauerb. (*Hyophila tortula* (Schwaegr.) Hampe). State report(s): Whitehouse & McAllister, 1954 (as *Hyophila tortula*); Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 40, as *Hyophila tortula*); Flowers, 1973 (p. 221); Reese, 1984 (p. 108); Sharp et al., 1994 (p. 271). On rocks in streams and on wet cliffs, mostly in limestone areas.
- \**Hyophiladelphus agrarius* (*Barbula agraria* Hedw.) State report(s): Whitehouse & McAllister, 1954 (as *Barbula agraria*); Mahler, 1980 (as *Barbula agraria*). Illustration(s): Reese, 1984 (p. 108, as *Barbula agraria*); Sharp et al., 1994 (p. 297, as *Barbula agraria*).
- \**Leptodontium flexifolium* (Dickson) Hampe (*Bryum flexifolium* Dickson). State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Zander, 1972; Sharp et al., 1994 (p. 262).
- \**Luisierella barbula* (Schwaegr.) Steere. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980; Redfearn, 1981. Illustration(s): Sharp et al., 1984 (p. 384).
- \**Microbryum davallianum* (Sm.) Zander var. *conicum* (Schwaegr.) Zander (*Gymnostomum conicum* Schwaegr.; *Pottia starckeana* (Hedw.) C. Muell. ssp. *conica* (Schleich. ex Schwaegr.) Chamb.; *Pottia texana* Wareham; *Pottia davalliana* (Sm.) Jens.). State report(s): Whitehouse & McAllister, 1954 (as *Pottia texana*); Mahler, 1980 (as *Pottia davalliana*). Illustration(s): Sharp et al., 1984 (p. 376, as *Pottia starckeana* ssp. *conica*).
- \**Microbryum starkeanum* (Hedw.) Zand. var. *starkeanum* (*Pottia starckeana* (Hedw.) C. Muell. subsp. *starckeana*; *Pottia arizonica* Wareham). State report(s): Magill, 1976 (as *Pottia arizonica*); Mahler, 1980 (as *Pottia arizonica*). Illustration(s): Sharp et al., 1984 (p. 376, as *Pottia starckeana* ssp. *starkeana*).
- \**Molendoa sendtnerianum* (B.S.G) Limpr. (*Anoetangium obtusifolium* (Card.) Grout). State report(s): Whitehouse & McAllister, 1954 (as *Anoetangium obtusifolium*); Magill, 1976 (as *Anoetangium obtusifolium*); Mahler, 1980 (as *Anoetangium obtusifolium*); Redfearn, 1981 (as *Anoetangium obtusifolium*). Illustration(s): Sharp et al., 1994 (p. 259, as *Molendoa sendtnerianum*).
- Pleurochaete squarrosa* (Brid.) Lindb. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Sharp et al., 1984 (p. 244).
- Pottia lanceolata* (Hedw.) C. Müll. (*Tortula lanceolata* Hedw.; *Encalyptra lanceolata* Hedw.). State report(s): Redfearn, 1981. Illustration(s): Lawton, 1971 (pl. 44, figs. 9-14); Watson & Richards, 1981 (p. 210).
- \**Pseudocrossidium crinitum* Schultz) Zander (*Barbula crinita* Schultz; *Tortula aurea* Bartram; *Barbula aurea*

- (Bartram) Zander. State report(s): Whitehouse & McAllister, 1954 (as *Tortula aurea*); Magill, 1976 (as *Tortula aurea*); Mahler, 1980 (as *Tortula aurea*).
- \**Pseudocrossidium replicatum* (Taylor) Zander (*Barbula spiralis* Schimp.; *Tortula spiralis* (Schimp.) Mitt.) State report(s): Whitehouse & McAllister, 1954 (as *Barbula spiralis*); Magill, 1976 (as *Barbula spiralis*); Mahler, 1980 (as *Barbula spiralis*). Illustration(s): Sharp et al., 1984 (p. 298).
- Pterygoneurum ovatum* (Hedw.) Dixon. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Flowers, 1973 (p. 174); Reese, 1984 (p. 111); Sharp et al., 1994 (p. 371).
- Pterygoneurum subsessile* (Brid.) Jur. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Flowers, 1973 (p. 174); Sharp et al., 1994 (p. 370).
- \**Rhexophyllum subnigrum* (Mitt.) Thér. (*Tortula subnigra* Mitt.). State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 260).
- Scopelophila cataractae* (Mitt.) Broth. State report(s): Reese, 1989. Illustration(s): Reese, 1989; Sharp et al., 1994 (p. 373).
- \**Splachnobryum obtusum* (Brid.) C. Müll. (*Weissia obtusa* Brid.; *Splachnobryum bernoullii* C. Müll.) State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Reese, 1984 (p. 116); Sharp et al., 1994 (p. 444). Treated by Kopenen in Sharp et al. (1994) as member of the *Splachnobryaceae*.
- Stegonia latifolia* (Schwaegr.) Vent. (*Pottia latifolia* (Schwaegr.) C. Müll.) State report(s): Whitehouse & McAllister, 1954 (as *Pottia latifolia*); Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 44, figs. 22, as *Pottia latifolia*); Flowers, 1973 (p. 170, as *Pottia latifolia*).
- Timmiella anomala* (B.S.G.) Limpr. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Redfearn, 1981. Illustration(s): Conard, 1956 (p. 40); Sharp et al., 1984 (p. 245).
- Tortella flavovirens* (Bruch) Broth. State report(s): Whitehouse & McAllister, 1954; Prior, 1961; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Smith, 1978 (p. 296); Reese, 1984 (p. 108).
- Tortella humilis* (Hedw.) Jenn. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1973; Magill, 1974; Magill, 1976; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 61); Lawton, 1971 (pl. 46, figs. 12-14); Reese, 1984 (p. 108); Sharp et al., 1984 (p. 238).
- Tortella tortuosa* (Hedw.) Limpr. State report(s): Magill, 1972; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 46, figs. 17-20); Flowers, 1973 (p. 138); Watson & Richards, 1981 (p. 229); Sharp et al., 1984 (p. 240).
- Tortula atherodes* Zander. (*Phascum cuspidatum* Hedw.). State report(s): Whitehouse & McAllister, 1954 (as *Phascum cuspidatum*); Magill, 1976 (as *Phascum cuspidatum*); Mahler, 1980 (as *Phascum cuspidatum*). Illustration(s): Lawton, 1971 (pl. 43, figs. 12-21, as *Phascum cuspidatum*); Flowers, 1973 (p. 163, as *Phascum cuspidatum*); Watson & Richards, 1981 (p. 215, as *Phascum cuspidatum*); Reese, 1984 (p. 111, as *Phascum cuspidatum*).
- Tortula bartramii* Steere. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 47, figs. 9-10); Sharp et al., 1994 (p. 339).
- Tortula fragilis* Tayl. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Conard, 1956 (p. 53); Sharp et al., 1994 (p. 342).
- Tortula humilis* (Hedw.) Jenn. Magill, 1973 [not reported as new to the state, so there must be an earlier Texas report in the literature].
- Tortula inermis* (Brid.) Mont. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 47, figs. 21-23); Flowers, 1973 (p. 203); Sharp et al., 1994 (p. 329).
- Tortula muralis* Hedw. State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Mahler, 1980. Illustration(s): Conard, 1956 (p. 55); Flowers, 1973 (p. 200); Watson & Richards, 1981 (p. 207).
- Tortula obtusifolia* (Schwaegr.) Mathey (*Desmatodon obtusifolius* (Schwaegr.) Schimp.). State report(s): Whitehouse & McAllister, 1954 (as *Desmatodon obtusifolius*); Prior, 1960 (as *Desmatodon obtusifolius*); Prior, 1961 (as *Desmatodon obtusifolius*); Mahler, 1980 (as *Desmatodon obtusifolius*); Redfearn, 1981 (as *Desmatodon obtusifolius*). Illustration(s): Lawton, 1971 (pl. 41, figs. 9-15, as

- Desmatodon obtusifolius); Flowers, 1973 (p. 192, as Desmatodon obtusifolius).
- Tortula obtusissima* C. Müll.) Mitt. State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980; Sharp et al., 1994 (p. 347).
- Tortula pagorum* (Milde) De Not. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1973; Magill, 1973; Magill, 1976; Mahler, 1980; Redfearn, 1981. Illustration(s): Conard, 1956 (p. 53); Reese, 1984 (p. 116); Sharp et al., 1994 (p. 338).
- Tortula papillosa* Wils. State report(s): Whitehouse & McAllister, 1954; Magill, 1972; Magill, 1976; Mahler, 1980. Illustration(s): Sharp et al., 1994 (p. 337).
- Tortula plinthobia* (Sull. & Lesq.) Brotherus (*Desmatodon plinthobius* Sull. & Lesq.). State report(s): Whitehouse & McAllister, 1954 (as *Desmatodon plinthobius*); Pursell & Reese, 1963 (as *Desmatodon plinthobius*); Magill, 1972 (as *Desmatodon plinthobius*); Magill, 1976 (as *Desmatodon plinthobius*); Mahler, 1980 (as *Desmatodon plinthobius*); Redfearn, 1981 (as *Desmatodon plinthobius*). Illustration(s): Conard, 1956 (p. 54, as *Desmatodon plinthobius*); Flowers, 1973 (p. 187, as *Desmatodon plinthobius*); Reese, 1984 (p. 93, as *Desmatodon plinthobius*).
- Tortula ruralis* (Hedw.) Gaertn. (*Tortula intermedia* (Brid.) De Not.). State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler, 1980. Illustration(s): Lawton, 1971 (pl. 50, figs. 10-14); Flowers, 1973 (p. 212); Watson & Richards, 1981 (p. 201); Sharp et al., 1994 (p. 351).
- Trichostomum brachydontium* Bruch. State report(s): Magill, 1976; Mahler, 1980. Illustration(s): Watson & Richards, 1981 (p. 230); Sharp et al., 1994 (p. 231).
- Trichostomum crispulum* Bruch ex F. A. Muell. var. *cucullatum* (Roth) Podp. State report(s): Redfearn, 1976; Mahler, 1980. Illustration(s): Redfearn, 1976; Watson & Richards, 1981 (p. 231); Sharp et al., 1994 (p. 232).
- Trichostomum tenuirostre* (Hook. & Tayl.) Lindb. (*Oxystegus tenuirostris* (Hook. & Tayl.) A. J. E. Smith; *Trichostomum cylindricum* (Bruch.) Muell.). State report(s): Mahler, 1980; Redfearn, 1981. Illustration(s): Lawton, 1971 (pl. 52, figs. 1-6); Flowers, 1973 (p. 134); Sharp et al., 1994 (p. 234, as *Oxystegus tenuirostris* var. *tenuirostris*).
- Weissia andersoniana* Zand. (*Weissia glauca* Bartram). State report(s): Whitehouse & McAllister, 1954 (as *Weissia glauca*); Magill, 1976 (as *Weissia glauca*); Mahler, 1980 (as *Weissia glauca*). Illustration(s): Sharp et al., 1984 (p. 218).
- Weissia andrewsii* Bartram. State report(s): Whitehouse & McAllister, 1954; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Sharp, 1994 (p. 219).
- Weissia condensata* (Voit.) Lindb. (*Weissia tortilis* (Schwaegr.) Muell.; *Hymenostomum tortile* (Schwaegr.) B.S.G.) State report(s): Whitehouse & McAllister, 1954 (as *Weissia tortilis*); Pursell & Reese, 1963 (as *Hymenostomum tortile*); Magill, 1976 (as *Hymenostomum tortile*); Mahler, 1980 (as *Weissia tortilis*). Illustration(s): Flowers, 1973 (p. 127, as *Weissia tortilis*); Sharp, 1994 (p. 220).
- Weissia controversa* Hedw. var. *controversa*. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1972; Magill, 1973; Magill, 1974; Magill, 1976; Mahler, 1980; Redfearn, 1981; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Lawton, 1971 (pl. 52, figs. 7-14); Flowers, 1973 (p. 125); Watson & Richards, 1981 (p. 233); Reese, 1984 (p. 100); Sharp, 1994 (p. 216).
- Weissia controversa* Hedw. var. *longiseta* (Lesq. & James) Crum, Steere & Anderson (*Weissia controversa* Hedw. var. *australis* (Aust.) Schornherst). State report(s): Whitehouse & McAllister, 1954 (as *Weissia controversa* var. *australis*); Mahler, 1980.
- Weissia hedwigii* (*Weissia microstoma* (Hedw.) C. Muell.; *Hymenostomum microstomum* (Hedw.) R. Brown). State report(s): Whitehouse & McAllister, 1954 (as *Weissia microstoma*); Prior, 1961 (as *Weissia microstoma*); Mahler, 1980 (as *Weissia microstoma*).
- Weissia jamaicensis* (Mitt.) Grout (*Trichostomum jamaicense* (Mitt.) Jaeg. & Sauerb.). State report(s): Whitehouse & McAllister, 1954; Magill, 1976 (report tentative); Mahler, 1980 (as *Trichostomum jamaicense*). Illustration(s): Reese, 1984 (p. 100); Sharp et al., 1984 (p. 215).
- Weissia ligulifolia* (Bartram) Grout. State report(s): Whitehouse & McAllister, 1954; Magill, 1976; Mahler,

1980; Redfearn, 1981. Illustration(s): Flowers, 1973 (p. 125). Ranked G3G5 by NatureServe, January 2003. Element code: NBMUS7X050.

#### 16. Ptychomitriaceae

- Ptychomitrium drummondii* (Wilson) Sull. (*Grimmia drummondii* Wilson). State report(s): Pursell & Reese, 1963; Mahler, 1980; Redfearn, 1981. Illustration(s): Reese, 1984 (p. 157).
- Ptychomitrium incurvum* (Schwaeg.) Spruce. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1973; Magill, 1976; Mahler, 1980. Illustration(s): Reese, 1984 (p. 157).
- Ptychomitrium serratum* Bruch & Schimp. State report(s): Bartram, 1926; Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Mahler, 1980. Illustration(s): Reese, 1984 (p. 157); Sharp et al., 1994 (p. 414).
- Ptychomitrium sinense* (Mitten) Jaeger (*Ptychomitrium leibergii* Best). State report(s): Whitehouse & McAllister, 1954; Magill, 1976 (as *Ptychomitrium leibergii*); Mahler, 1980 (as *Ptychomitrium leibergii*); Redfearn, 1981 (as *Ptychomitrium leibergii*); Sharp et al., 1994 (p. 414, as *Ptychomitrium leibergii*).

#### 54. Rhytidiaceae

- \**Rhytidium rugosum* (Hedw.) Lindb. State report(s): Bartram, 1940; Whitehouse & McAllister, 1954; Magill, 1972; Mahler, 1980. Illustration(s): Conard, 1956 (p. 97); Lawton, 1971 (pl. 195, figs. 1-3); Sharp et al., 1994 (p. 1062).

#### 70. Sematophyllaceae

- Brotherella recurvans* (Michx.) Fleischer. State report(s): Stoneburner & Wyatt, 1979; Mahler, 1980. Illustration(s): Conard, 1956 (p. 140); Reese, 1984 (p. 219).
- Sematophyllum adnatum* (Michx.) Britt. State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Pursell & Reese, 1963; Magill, 1972; Magill, 1973; Magill, 1974; Mahler, 1980; Redfearn, 1981; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 139); Reese, 1984 (p. 219); Sharp et al., 1994 (p. 1001).
- Sematophyllum subpinnatum* (Brid.) Britt. (*Sematophyllum carolinianum* (C. Müll.) Britt.; *Sematophyllum demissum* (Wils.) Mitt.). State report(s): Whitehouse & McAllister, 1954 (as *Sematophyllum carolinianum*); Mahler, 1980 (as *Sematophyllum demissum*); Sharp et al., 1994 (p. 742). Illustration(s): Reese, 1984 (p. 219, as *Sematophyllum demissum*).

#### 2. Sphagnaceae

- Sphagnum cuspidatum* Ehrh. ex Hoffm. State report(s): Lodwick & Snider, 1980; Mahler, 1980. Illustration(s): Smith, 1978; Watson & Richards, 1981 (p. 1).
- Sphagnum cyclophyllum* Sull. & Lesq. State report(s): Whitehouse & McAllister, 1954; Lodwick & Snider, 1980; Mahler, 1980; Wyatt, Lane & Stoneburner, 1980; Reese, 1984. Illustration(s): Reese, 1984 (p. 39).
- Sphagnum henryense* Warnst. State report(s): Reese, 1984. Illustration(s): Reese, 1984 (p. 44).
- Sphagnum imbricatum* Hornsch. State report(s): Whitehouse & McAllister, 1954; Lodwick & Snider, 1980; Wyatt, Lane & Stoneburner, 1980.
- Sphagnum imbricatum* Hornsch. var. *affine* (Ren. & Card.) Warnst. State report(s): Whitehouse & McAllister, 1954; Magill, 1974; Mahler, 1980; Reese, 1984. Illustrations: Reese, 1984 (p. 42).
- Sphagnum lescurii* Sull. & Lesq. State report(s): Lodwick & Snider, 1980; Mahler, 1980; Wyatt, Lane & Stoneburner, 1980; Reese, 1984. Illustration(s): Reese, 1984 (p. 44).

- Sphagnum macrophyllum* Bernh. State report(s): Whitehouse & McAllister, 1954; Lodwick & Snider, 1980; Mahler, 1980; Wyatt, Lane & Stoneburner, 1980; Reese, 1984. Illustration(s): Reese, 1984 (p. 39). Ranked G3 by NatureServe, January 2003. Element code: NBMUS6Z0L0.
- Sphagnum magellanicum* Brid. State report(s): Whitehouse & McAllister, 1954; Lodwick & Snider, 1980; Mahler, 1980; Reese, 1984. Illustration(s): Conard, 1956 (p. 24); Reese, 1984 (p. 39); Sharp et al., 1994 (p. 5).
- Sphagnum molle* Sull. State report(s): Lodwick & Snider, 1980; Mahler, 1980; Wyatt, Lane & Stoneburner, 1980; Reese, 1984. Illustration(s): Reese, 1984 (p. 47).
- Sphagnum palustre* L. State report(s): Whitehouse & McAllister, 1954; Lodwick & Snider, 1980; Mahler, 1980; Wyatt, Lane & Stoneburner, 1980; Reese, 1984. Illustration(s): Watson & Richards, 1981 (p. 126); Reese, 1984 (p. 42); Sharp et al., 1994 (p. 8).
- Sphagnum perichaetiale* Hampe. State report(s): Stoneburner & Wyatt, 1979; Lodwick & Snider, 1980; Mahler, 1980; Wyatt, Lane & Stoneburner, 1980. Illustrations: Reese, 1984 (p. 40); Sharp et al., 1994 (p. 7).
- Sphagnum recurvum* P.-Beauv. State report(s): Lodwick & Snider, 1980; Mahler, 1980; Wyatt, Lane & Stoneburner, 1980. Illustration(s): Reese, 1984 (p. 49); Watson & Richards, 1981 (p. 130); Sharp et al., 1994 (p. 14).
- Sphagnum subsecundum* Nees. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1973; Magill, 1974. According to Magill (1973), Texas material belongs to var. *rufescens* (Nees, Hornsch & Sturm) Hueb. Illustration(s): Sharp et al., 1994 (p. 16); Watson & Richards, 1981 (p. 1, var. *auriculatum* only).

#### 34. Splachnaceae

- Tetraplodon pensylvanicus* (Brid.) Grout (*Bryum pensylvanicum* Brid.; *Splachnum pensylvanicum* (Brid.) Grout). Southern dung moss. State report(s): Whitehouse & McAllister, 1954; Crum, 1966; Mahler, 1980. Illustration(s): Crum & Anderson, 1981 (p. 500, as *Splachnum pennsylvanicum*); Reese, 1984 (p. 133, as *Splachnum pennsylvanicum*). Ranked G4? by NatureServe, January 2003 (as *Splachnum pennsylvanicum*). Element code: NBMUS71030. As common name implies, this species does indeed grow on the dung of herbivores, especially cows but also horses and mules; it also occurs on old bones, soil, concrete and in swamy sites (Crum & Anderson, 1981; Reese, 1984).

#### 60. Stereophyllaceae

- Stereophyllum radiculosum* (Hook.) Mitt. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1974; Mahler, 1980; Redfearn, 1981. Illustration(s): Reese, 1984 (p. 213).

#### 77. Theliaceae

- Thelia asprella* (B.S.G.) Sull. var. *asprella*. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1972; Magill, 1973; Magill, 1974; Mahler, 1980; Redfearn, 1981. Illustration(s): Conard, 1956 (p. 103); Reese, 1984 (p. 186).
- Thelia asprella* (B.S.G.) Sull. var. *lescurii* (Sull.) Ren. & Card. (*Thelia lescurii* Sull. in Sull. & Lesq.). State report(s): Whitehouse & McAllister, 1954 (as *Thelia lescurii*); Pursell & Reese, 1963; Magill, 1973 (as *Thelia lescurii*); Mahler, 1980. Illustration(s): Reese, 1984 (p. 186, as *Thelia lescurii*).
- Thelia hirtella* (Hedw.) Sull. in Sull. & Lesq. State report(s): Whitehouse & McAllister, 1954; Prior, 1960; Pursell & Reese, 1963; Magill, 1973; Mahler, 1980; Redfearn, 1981; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 104); Reese, 1984 (p. 186); Sharp et al., 1994 (p. 681).

57. Thuidiaceae

- Cyrto-hypnum minutulum* (Hedw.) Buck & Crum (*Thuidium minutulum* (Hedw.) B.S.G.). State report(s): Whitehouse & McAllister, 1954 (as *Thuidium minutulum*); Pursell & Reese, 1963 (as *Thuidium minutulum*); Mahler, 1980 (as *Thuidium minutulum*); Neumann, Rushing, Bazán & Mueller, 1983 (as *Thuidium minutulum*). Illustration(s): Conard, 1956 (p. 109, as *Thuidium minutulum*); Reese, 1984 (p. 199, as *Thuidium minutulum*); Sharp et al., 1994 (p. 884, as *Cyrto-hypnum minutulum*).
- \**Thuidium allenii* Aust. State report(s): Reese, 1961; Pursell & Reese, 1963; Magill, 1972; Magill, 1973; Mahler, 1980. Illustration(s): Reese, 1984 (p. 202).
- \**Thuidium delicatulum* (Hedw.) Schimp. in B.S.G. var. *delicatulum*. State report(s): Whitehouse & McAllister, 1954; Pursell & Reese, 1963; Magill, 1974; Mahler, 1980; Neumann, Rushing, Bazán & Mueller, 1983. Illustration(s): Conard, 1956 (p. 109); Reese, 1984 (p. 199); Sharp et al., 1994 (p. 876).
- Haplocladium virginianum* (Brid.) Broth. (*Thuidium virginianum* (Brid.) Lindb.; *Bryohaplocladium virginianum* (Brid.) Wats. & Iwats.) State report(s): Whitehouse & McAllister, 1954 (as *Thuidium virginianum*). Illustration(s): Conard, 1956 (p. 108, as *Thuidium virginianum*). Reese (1984) noted that the species had been reported from Alabama and Texas but doubted its occurrence in the Gulf South area.

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