

## Graminicolous Fungi of Virginia: Fungi Associated with Genera *Echinochloa* to *Zizania*

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### ABSTRACT

Fungi on grasses in the genera *Echinochloa* through *Zizania* in Virginia are recorded. The list includes all fungi found listed in publications and those collected by the authors. Many host-fungus associations new to the United States (159), Eastern United States (24), and Virginia (44) are recorded. The significance of these grass-fungus associations is discussed.

### INTRODUCTION

This is the third article on graminicolous fungi in Virginia; it includes fungi on grasses collected and identified by the authors and those listed by Farr et al. (1989) as occurring in Virginia. No effort was made to establish parasitic relations. The format previously established will be followed (Roane & Roane, 1996). When an apparently new association is reported, the symbols NR-U, NR-EU, and NR-V will appear. These indicate new record, United States; new record, Eastern United States meaning east of the Mississippi R.; and new record, Virginia. At present, specimens for most new records are in a personal collection at V.P.I. & S.U. The primary purpose is to report fungus-grass associations and establish that the fungi actually exist in Virginia. This is a contribution to the natural history of Virginia.

*Echinochloa crusgalli* (L.) P. Beauv., barnyardgrass

#### Basidiomycotina-Ustilaginales:

*Ustilago trichophora* (Link.) Körn., causing loose smut, was collected at the marina cove in Claytor Lake S.P., Pulaski Co., Oct. 23, 1991 (91-90). According to Farr et al. (1989), it occurs throughout the range of the host, but there are no records specifically from Virginia. (NR,V).

#### Deuteromycotina-Hyphomycetes:

*Nigrospora sphaerica* (Sacc.) E. Mason appeared on incubated dead leaves collected at the superintendent's cove, Claytor Lake S.P., Sept. 8, 1991. *Echinochloa* is not listed as a host of this fungus by Farr et al. (1989). (NR,U).

#### Deuteromycotina-Coelomycetes:

*Colletotrichum graminicola* (Ces.) G. W. Wils. appeared to be killing plants at the head of the superintendent's cove, Claytor Lake S.P., Sept. 8, 1991 (91-82). Abundant acervuli on blades and culms created striking lesions. Although listed as in central and eastern states, it is not specifically recorded from Virginia by Farr et al. (1989). (NR,V).

*Phoma sorghina* (Sacc.) Boer., Doren. & Van Kest., (synonym, *Phyllosticta sorghina* Sacc.) occurred on leaves collected at Goodwins Ferry, Giles Co., Aug. 6, 1989 (89-25). (NR,U).

#### *Elymus canadensis* L., Canada wild-rye

Although *Elymus canadensis* is common in Virginia, we have not collected fungi on it. Farr et al. (1989) list *Claviceps purpurea* as occurring in eastern states, and *Erysiphe graminis* as occurring throughout the range of *E. canadensis*. We assume Virginia is included but there are no reports specifically for Virginia.

#### *Elymus riparius* Wiegand

##### Ascomycotina:

*Phyllachora graminis* (Per.:Fr.) Nitschke, causing tar spot, etc. is probably the commonest fungus on *Elymus* spp. in eastern United States. We have collected it on *E. riparius* at the Giles-Montgomery Co. line along the banks of New R., Oct. 21, 1984 (84-Er-1), along Big Reed Island Ck., Rt. 764, 1 mi. below mouth of Greasy Ck., Carroll Co., July 22, 1991 (91-70a, b); and 3/4 mi. above Rt. 613 bridge along Little R., Montgomery Co., Aug. 18, 1993 (93-18). (NR,V).

##### Basidiomycotina-Uredinales:

*Puccinia recondita* Roberge ex Desmaz. was collected at the Carroll Co. site, July 22, 1991 (91-70a). The only other eastern U.S. collection is on *E. canadensis* from Georgia (Farr et al., 1989). (NR,U).

##### Deuteromycotina-Hyphomycetes:

*Bipolaris sorokiniana* (Sacc.) Shoem. occurred at the Carroll Co. site, July 22, 1991 (91-70a, b). The fungus was sporulating at the nodes. There are no records for this fungus on *Elymus* spp. in eastern U.S. and none on *E. riparius* (Farr et al., 1989). (NR,U).

*Nigrospora sphaerica* (Sacc.) E. Mason fruited quickly on incubated leaves from the Little R., Montgomery Co. collection of Aug. 18, 1993 (93-18). The fungus has not been reported from *Elymus* spp. (Farr et al., 1989). (NR,U).

##### Deuteromycotina-Coelomycetes:

*Ascochyta sorghi* Sacc. was collected at the Carroll Co. site July 22, 1991 (91-70a). Surprisingly, this common gramminicolous fungus has not been detected on *Elymus* spp. in eastern U.S. nor on *E. riparius* in U.S. (Farr et al., 1989). (NR,U). It also occurred on an unidentified *Elymus* sp. at Claytor Lake S.P., Oct. 1979 (79-E-1).

*Colletotrichum graminicola* (Ces.) G. W. Wils. was collected along the New R. at the Giles-Montgomery Co., Oct. 21, 1984 (84-Er-1). There are two eastern U.S. reports on *Elymus* spp. but none on *E. riparius* (Farr et al., 1989). (NR,U). We have a collection on an unidentified *Elymus* sp. from Claytor Lake S.P., Pulaski Co., Oct. 1979 (79-E-1).

*Phaeoseptoria urvilleana* (Speg.) Sprague occurred at the New R.-Montgomery-Giles Co. site Oct. 21, 1984 (84-Er-1). Sprague (1943) lists several *Phaeoseptoria* spp. which are similar to the hyaline-spored *Septoria* but the former are yellow or brown-spored and somewhat broader. In the key provided by Sprague, our specimen having 7-8-septate pycnidiospores measuring 45-50 X 4.5-5.0  $\mu\text{m}$ , best fits *P. urvilleana*. Farr

et al. (1989) list *P. elymi* and *P. festucae* var. *muhlenbergiae* as occurring on *Elymus* spp. in western U.S.; they do not list *P. urvilleana* which is recognized only in South America. (NR,U).

*Phoma sorghina* (Sacc.) Boer., Doren., & Van Kest. occurred at the New R.-Montgomery-Giles Co. site, Oct. 21, 1984 (84-Er-1). No *Phoma* spp. on *Elymus* spp. have been assigned a specific epithet (Farr et al., 1989). (NR,U).

*Elymus villosus* Muhl., hairy wild-rye

Ascomycotina:

*Phaeosphaeria herpotrichoides* (De Not.) L. Holm, having brown, 7-9-septate ascospores, 3rd cell enlarged, and measuring 38-45 X 5  $\mu\text{m}$ , was collected along Big Reed Island Ck. at the confluence with Greasy Ck., Carroll Co., April 28, 1991 (91-13). Although known to occur on several *Elymus* spp. in western U.S., it is not reported on *E. villosus* (Farr et al., 1989). For illustrations and descriptions, see Ellis & Ellis (1985) and Shoemaker & Babcock (1988). (NR,U).

*Elymus virginicus* L., Virginia wild rye

Ascomycotina:

*Didymosphaeria* sp., or perhaps *Keissleriella* sp., with ascomata lacking paraphyses was associated with spots on blades and sheaths, was collected at McCoy, Montgomery Co., Oct. 1981 (81-Ev-3). Asci are bitunicate, clavate to obovoid, 8-spored, biseriate; brown ascospores have 2 slightly unequal cells, with median septum, echinulate surface, measuring 11-13 X 5  $\mu\text{m}$ . We have been unable to locate appropriate diagnostic literature.

*Mycosphaerella recutita* (Fr.:Fr.) Johans. also occurred in the collection above (81-Ev-3). Ascospores measured 11-13 X 3.0-3.5  $\mu\text{m}$  (Ellis & Ellis, 1985). It is known on several North American grasses but not on *Elymus* spp. (Farr et al., 1989). (NR,U).

*Phaeosphaeria herpotrichoides* (De Not.) L. Holm was collected on overwintered culms at the end of Rt. 600, Parrott, Pulaski Co., April 14, 1991 (91-8). Ascospores measured 35-40 X 5  $\mu\text{m}$  and were 7-9-septate, almost identical to those from *E. villosus* above. In both cases, ascospores were longer than those described by Ellis & Ellis (1985) and Shoemaker & Babcock (1989). However, the fungus fits better into this species than into any other described by these authors. It is also the primary species of *Phaeosphaeria* previously found on *Elymus* spp. (NR,EU).

*Phyllachora graminis* (Pers.:Fr.) Nitschke, causing tar spot, is the most obvious and common fungus on *Elymus* spp. We have collected it in Montgomery Co. at McCoy, Oct. 1981 (81-Ev-3), and Fagg, Nov. 6, 1983 (83-Ev-1); at Claytor Lake S.P., Oct. 3, 1982, and July 14, 1989; along Va. 8, 1 mi. N. of Rt. 807, Floyd Co., Sept. 26, 1994; and at Rt. 700 and Sinking Ck., Giles Co., Nov. 14, 1981. Farr et al. (1989) list the fungus as occurring in the range of the host.

Other ascomycetous fungi which we have not collected but which occur in Virginia include *Claviceps purpurea* (Fr.:Fr.) Tul., and *Erysiphe graminis* DC. (Farr et al., 1989).

**Basidiomycotina:**

*Puccinia recondita* Roberge ex Desmaz., II, III, leaf rust, was collected at Fagg, Montgomery Co., Nov. 6, 1983 (83-Ev-2); and Adner, Gloucester Co., June 24, 1991 (91-47). (NR,U). The Adner collection of rust was colonized by *Sphaerellopsis filum* (Biv.-Bern. ex Fr.) Sutton, a common hyperparasite of rust fungi. (NR,U).

**Deuteromycotina-Hyphomycetes:**

*Bipolaris sorokiniana* (Sacc.) Shoem. was associated with pointed, spindle-shaped lesions on leaves collected near the superintendent's boat dock, Claytor Lake S.P., Pulaski Co., July 14, 1989 (89-12). It was identified previously on *E. virginicus* only in Minnesota and North Dakota (Farr et al., 1989). (NR,EU).

**Deuteromycotina-Coelomycetes:**

*Ascochyta sorghi* Sacc. was fruiting on senescent leaves collected at Craig Ck. Recreation Area, Oriskany, Botetourt Co., July 31, 1994 (94-25); and along Va. 8, 1 mi. N. of Rt. 807, Floyd Co., Sept. 26, 1994 (94-70). It has been reported only from Texas and Illinois (Farr et al., 1989). (NR,V).

*Hendersonia culmicola* Sacc. var. *minor* Sacc., having black pycnidia with 3-4-septate, light brown spores, occurred on leaves collected at Claytor Lake S.P., Oct. 3, 1982 (82-Ev-1). This fungus has not been previously collected on *Elymus* spp. (Farr et al., 1989). A key to *Hendersonia* spp. is provided by Sprague (1950). (NR,U).

*Septoria infuscans* (Ellis & Everh.) R. Sprague, associated with brown leaf blotch was found on leaves from Craig Ck. Recreation Area, Oriskany, Botetourt Co., July 31, 1994 (94-25). It is reported on several other *Elymus* spp. from western states (Farr et al., 1989) and was determined from the key provided by Sprague (1950). (NR,U).

*Sphaerellopsis filum* was collected at Adner, Gloucester Co. See under *Puccinia recondita* above.

*Stagonospora arenaria* (Sacc.) Sacc. was also present in the Botetourt Co. collection above (94-25). It is known on several *Elymus* spp. but on *E. virginicus* only from Michigan and North Dakota (Farr et al., 1989). (NR,V).

***Eragrostis* spp., lovegrass**

Since there are seven species of *Eragrostis* to be listed and several fungi occur on at least two species, the grasses are numbered for referral in the discussion.

- 1 *Eragrostis capillaris* (L.) Nees, lacegrass.
- 2 *E. cilianensis* (All.) Lutati, stinkgrass.
- 3 *E. curvula* (Schrad.) Nees, weeping lovegrass.
- 4 *E. hirsuta* (Michx.) Nees.
- 5 *E. pectinacea* (Michx.) Nees, tufted lovegrass.
- 6 *E. refracta* (Muhl.) Scribn.
- 7 *E. spectabilis* (Pursh) Steud., purple lovegrass.

**Ascomycotina:**

*Balansia epichloe* (Weese) Diehl, black choke, is listed by Farr et al. (1989) on 1, 4, & 6. These records are from Diehl (1950), who monographed the genus. We have not encountered the fungus.

*Phomatospora dinemasporium* J. Webster is a cosmopolitan saprophyte which fruits readily on incubated senescent hosts. A collection on 7 was obtained at Claytor Lake S.P., Pulaski Co., Aug. 11, 1989. (NR,U).

#### Basidiomycotina-Uredinales:

*Uromyces eragrostidis* Tracy, II, III, leaf rust, occurs on 1 & 5 from New Jersey to Alabama although the aecial host, *Anthericum torreyi* Baker, functions only in Arizona (Farr et al., 1989). Thus, the fungus must survive annually in the uredial (II) stage. We have no collections of *U. eragrostidis*.

#### Basidiomycotina-Ustilaginales:

*Ustilago spermaphora* Berk. & Curtis, seed smut, was observed regularly in fields near the V.P.I. & S.U. duck ponds, now the golf course, Blacksburg, Montgomery Co., 1948-1960 (50-Ec-1), and occurs annually in our garden at 607 Lucas Dr., Blacksburg after being first observed in 1985, and collected Oct. 24, 1989 (89-61). Farr et al. (1989) cite its occurrence in eastern states but not specifically in Virginia. (NR,V).

#### Deuteromycotina-Hyphomycetes:

*Bipolaris cynodontis* (Marignoni) Shoem., with 6-9-septate spores measuring 45-64 X 11-14  $\mu\text{m}$ , fruited on incubated leaves of 5 collected around the picnic area parking lot Claytor Lake S.P., Pulaski Co., Oct. 1, 1995 (95-42). Farr et al. (1989) do not list this fungus on any *Eragrostis* spp. (NR,U).

*Bipolaris hadrotrichiodes* (Ellis & Everh.) Luttrell is listed by Farr et al. (1989) on 2. This record traces to Drechsler's (1923) original description (*Helminthosporium leucostylum*) Drechsler.). The taxonomy of this species has been questioned by Shoemaker (1959). Note the confusion of this species with *B. nodulosa* below.

*Bipolaris nodulosa* (Berk. & Curtis) Shoem., causing a leaf spot on 2, is listed by Farr et al. (1989). They also have *H. leucostylum* as a synonym (p. 588). Thus, the Virginia record is probably attributed to Drechsler (1923).

*Bipolaris specifera* (Bainier) Subram., occurred on incubated leaves of 2 collected at Franklin Rd. and Avenham Av., Roanoke, Oct. 7, 1994. Farr et al. (1989) do not list this fungus on *Eragrostis* spp. (NR,U).

*Curvularia lunata* (Wakker) Boed. was collected on 2 in our garden at 607 Lucas Drive, Blacksburg, Montgomery Co., Oct. 24, 1989 (89-61); on 5 from the picnic area, Claytor Lake S.P., Oct. 1, 1995 (95-42); and on 7 along the shore at Claytor Lake S.P., Pulaski Co., Aug. 11, 1989 (89-31). All are NR,U.

*Drechslera gigantea* (Heald & Wolf) Ito, causing zonate leaf spot is reported in Virginia on 3 & 5 by Farr et al. (1989). These records are attributable to Drechsler (1928, 1929).

*Exserohilum rostratum* (Drechsler) Leonard & Suggs fruited on incubated leaves of 2 collected at Franklin Rd. & Avenham Av., Roanoke, Oct. 7, 1994 (94-66). (NR,U).

#### Deuteromycotina-Coelomycetes:

*Ascochyta hordei* Hara, fruited on leaves of 3 collected along U.S. 17, Adner, Gloucester Co., Nov. 25, 1982 (82-Ec-1). No *Ascochyta* spp. are listed on *Eragrostis* by Farr et al. (1989). (NR,U).

*Colletotrichum graminicola* (Ces.) G. W. Wils., causing anthracnose, has been collected on 3 at the Adner site above (82-Ec-1), and on 7 at the Piedmont Research Station, Orange, Sept. 1983 (83-Es-1). Both collections are NR,U.

*Phoma sorghina* (Sacc.) Boer., Doren, and Van Kest. was collected on 2 in Blacksburg, Montgomery Co., Oct. 24, 1989 (89-61) and at Franklin Rd. & Avenham Av., Roanoke, Oct. 7, 1994 (94-66). (NR,U).

*Stagnospora maculata* Castellani & Germano, evidently causing leaf spots, was collected on along the shore at Claytor Lake S.P., Pulaski Co., Aug. 11, 1989. (NR,U).

*Erianthus alopecuroides* (L.) Elliott, silver plumegrass

Deuteromycotina-Hyphomycetes:

*Nigrospora sphaerica* (Sacc.) E. Mason fruited on freshly incubated leaves collected along U.S. 58, 200 yds. E. of Rt. 867, near Patrick Springs, Patrick Co., Sept. 25, 1994 (94-55). (NR,U).

*Tetraploa aristata* Berk. & Broome appeared in the sample above (94-55) and in a collection along U.S. 58 near Critz, Patrick Co., Aug. 19, 1991 (91-76). (NR,U). An unidentified *Ascochyta* sp. was associated with leaf spots in these collections; *T. aristata* was probably saprophytic.

Deuteromycotina-Coelomycetes:

*Coniothyrium psammae* Oudem. was also present on dead leaves in the collection from Patrick Springs (94-55). Spores measured 6.5-8.0 X 4-5  $\mu$ m. This fungus causes leaf spots on *Calamagrostis* spp. in Oregon and Alaska (Farr et al., 1989). (NR,U).

*Rhynchosporina tridentis* Sprague & Rogerson, was associated with leaf spots in the Patrick Springs collection above (94-55). Spores are falcate, 12-15 X 1.8-2.1  $\mu$ m. This fungus is common on *Tridens flavus* (L.) Hitchc. in Virginia. (NR,U).

*Festuca* spp., fescue

- 1 *Festuca capillata* Lam., hair fescue.
- 2 *F. elatior* L. (including *F. arundinacea* Schreb. and *F. pratensis* Huds.), meadow fescue.
- 3 *F. myuros* L., raitail fescue.
- 4 *F. obtusa* Biehler, nodding fescue.
- 5 *F. octoflora* Walt., six-weeks fescue.
- 6 *F. ovina* L., sheep fescue.
- 7 *F. rubra* L., red fescue and including Chewings fescue.

Plasmodiophoromycetes:

*Polymyxa graminis* Ledingham, was collected in roots of 2 at Broadus Flats off U.S. 360, Hanover Co., Apr. 7, 1982 (82-Fe-1); at Island Farm, along U.S. 360, Richmond Co., Apr. 26, 1983 (83-Fe-2); and 3, W. D. Edwards Farm, Westmoreland Co., Apr. 26, 1983 (83-Fm-1). Although we reported 2 as a host previously (Roane & Roane, 1983), our report was ignored by Farr et al. (1989). (2, 3, NR,U).

Ascomycotina:

*Claviceps purpurea* (Fr.:Fr.) Tul., ergot, occurs on 2 in almost every stand. We find it wherever we find 2 approaching maturity. Collections have come from the Kipps Farm, Montgomery Co., July 1982, (82-Fe-2); Jefferson National Forest,

Montgomery Co., July 10, 1983 (83-Fe-1); Indian Valley, Floyd Co. along Rt. 619, July 4, 1991 (91-59); Dickey Ridge Recreation Center, Skyline Dr., Warren-Rappahannock Co. line, July 11, 1991 (91-63); Big Meadows, Skyline Dr., Madison Co., July 11, 1991 (91-67); the cabin area, Claytor Lake S.P., Pulaski Co., Sept. 9, 1991 (91-81); Pulaski Wayside, Draper Mt. on U.S. 11, Pulaski Co., Aug. 6, 1992 (92-24); McCormick Farm, Steeles Tavern, Augusta Co., July 18, 1993 (93-13); White Top Mt., Grayson Co., (about 4900' elevation), Aug. 14, 1994 (94-34). Despite the demonstrated wide range of *C. purpurea* on 2 in Virginia, Farr et al. (1989) do not list Virginia as habitat, but state the fungus occurs in the range of the host. (NR,V). On 6, collections from the lake shore, cabin area, Claytor Lake S.P., Pulaski Co., July 14, 1989 (89-13); [in this case, inflorescences had proliferated flower parts (phyllody)], and from Dickey Ridge Recreation Center, Skyline Dr., July 11, 1991 (91-64).

*Epichloe typhina* (Pers.:Fr.) Tul., choke, occurs in the anamorphic stage (*Acremonium typhinum* Morgan-Jones & W. Gams) as an endophyte. It has been confused with *A. coenophialum* (to be listed below), which causes a debilitating condition in cattle. Both *Acremonium* spp. have been found in Virginia but we do not possess the records.

*Keissleriella culmifida* (Karst.) Bose is a plurivorous fungus having pale yellow ascospores in a mucilaginous envelope. Spores are 3-septate, 20-24 X 4-6  $\mu\text{m}$  (see Ellis & Ellis, 1985). Our collection on 1 came from the War Branch Trail, off Rt. 613, Giles Co., June 24, 1990 (90-43a & b). (NR,U).

*Phaeosphaeria herpotrichoides* (De Not.) L. Holm occurred on glumes of 2 collected at White Top Mt., Grayson Co., Aug. 14, 1994 (94-34). The species was determined from the key of Shoemaker & Babcock (1989). Ascospores were 5-8-septate, 30-33 X 5  $\mu\text{m}$ , second cell usually enlarged. (NR,U).

*Phaeosphaeria nigrans* (Roberge ex Desmaz.) L. Holm was fruiting on one stem of 2 collected at the lake shore, Claytor Lake S.P., Pulaski Co., Sept. 16, 1995 (95-33b). The fungus was identified with the aid of keys by Shoemaker & Babcock (1988). Farr et al. (1989) do not list this fungus on *Festuca* spp. (NR,U).

*Phomatospora dinemaspodium* J. Webster fruited in the anamorphic state rapidly on leaves of 4 collected on Brush Mt. near the Audie Murphy Monument, Roanoke-Craig Co. line, June 19, 1994 (94-15). Farr et al. (1989) list it only on *Carex* spp., but we have found it several times on grasses. Ellis & Ellis (1985) list it on several genera of grasses including *Festuca*. (NR,U).

#### Basidiomycotina-Uredinales:

*Puccinia coronata* Cda., II, crown rust, was collected on 2 in Emporia, Greensville Co., Nov. 28, 1985 (85-Fe-1). Although Farr et al. (1989) list it as in the range of the host, this is our only collection.

*Puccinia graminis* Pers.:Pers., II, III, has been collected on 2 at the picnic area, Claytor Lake S.P., Pulaski Co., Oct. 25, 1989 (89-60) and in the cabin area Sept. 9, 1991 (91-81); at Camp Fincastle, Botetourt Co., Oct. 29, 1989 (89-65); on N. Main St. near U.S. 460, Blacksburg, Montgomery Co., Oct. 15, 1990 (90-84) and at 607 Lucas Dr., Blacksburg, July 1993 (93-25); at Pulaski Wayside Draper Mt., Pulaski Co., Aug. 6, 1992 (92-24). It is listed as in range of host by Farr et al. (1989).

*Puccinia recondita* Roberge ex Desmaz., II, was collected on 2 at Goodwins Ferry, Giles Co., Aug. 5, 1989 (89-26). (NR,V).

## Basidiomycotina-Ustilaginales:

*Ustilago striiformis* (West.) Niessl, stripe smut, is reported on 4 by Farr et al. (1989) who cite Fischer (1953) as the source. However, Fischer did not cite any collections on *Festuca* from Virginia. This is a questionable report.

## Basidiomycotina-other:

*Melanotus phillipsii* (Berk. & Broome) Singer occurred on 6, apparently killing colonized leaves and stems in our yard at 607 Lucas Dr., Blacksburg, Montgomery Co., July 27, 1994. Farr et al. (1989) do not list this taxon. (NR,U). Wick (1988) reported *M. phillipsii* as causing white patch on 7 during 1982 in Campbell, Carroll, Prince William and Wise Cos. but this report did not appear in time to be included by Farr et al. (1989). (NR,U).

## Deuteromycotina-Hyphomycetes:

*Acremoniella verrucosa* Tognini fruited on senescent culms of 2 collected on Lucas Dr., Blacksburg, Montgomery Co., Nov. 9, 1981 (81-Fe-1). It is illustrated by Ellis (1971); it is not included by Farr et al. (1989). (NR,U).

*Bipolaris sorokiniana* (Sacc.) Shoem. is listed by Farr et al. (1989) on 7 as a cause of leaf spots. We have not encountered it.

*Curvularia lunata* (Wakker) Boed. was collected on 6 along the lake shore, cabin area, Claytor Lake S.P., Pulaski Co., July 14, 1989 (89-13). (NR,U).

*Drechslera dematioides* (Bubák & Wröbl) Subram. & Jain, on 5 came from the superintendent's cove, Claytor Lake S.P., Pulaski Co., May 30, 1991 (19-24). (NR,U).

*Drechslera dictyoides* (Drechs.) Shoem. also was present on 5 in the collection above (91-24). (NR,U). It is widely present on 2 throughout Virginia although only one specimen is on hand, that from the Piedmont Research Station, Orange, May 22, 1983 (83-Fe-3).

## Deuteromycotina-Coelomycetes:

*Ascochyta sorghi* Sacc. was fruiting in dead leaves of 2 sent to the Plant Clinic at V.P.I. & S.U. from Williamsburg, James City Co., May 1, 1990 (90-13, Pl. Cl. no. 90-54). We found it on rachises and glumes of 2 along Rt. 619, Indian Valley, Floyd Co., July 4, 1991. Later we also found it on dead leaf sheaths of 6 from the cabin area, Claytor Lake S.P., Pulaski Co., July 14, 1989 (89-13). (NR,U).

*Colletotrichum caudatum* (Sacc.) Peck fruited on dead leaves of 3 collected near the main picnic area and near the superintendent's house, Claytor Lake S.P., Pulaski Co., June 17, 1990 (90-35). (NR,U). It is described and illustrated by Sutton (1980, pp. 531-532).

*Colletotrichum graminicola* (Ces.) G. W. Wils. probably occurs either as a pathogen or a saprophyte on every species of *Festuca* in Virginia. We have found it on all listed except 4. Two collections on 1 came from the N. end of Mt. Lake on Rt. 613, Giles Co., May 26, 1991 (91-19) and from War Branch Trail also off Rt. 613, Giles Co., June 24, 1990 (90-43). (NR,U). There are several collections on 2; Piedmont Research Station, Orange, May 22, 1983 (83-Fe-3); Emporia, Greensville Co., Nov. 28, 1985 (85-Fe-1); from Claytor Lake S.P., Pulaski Co., marina cove shore, Aug. 2, 1989 (89-19); main picnic area, Oct. 25, 1989 (89-60); and from the cabin area, Mar. 10, 1991 (91-2) and Sept. 9, 1991 (91-81); from Camp Fincastle, Botetourt Co.,



Oct. 29, 1989 (89-65); from Williamsburg, James City Co., May 1, 1990, causing die-back (90-13, Plant Clinic no. 90-54); from Blacksburg, Montgomery Co. along N. Main St. near U.S. 460, Oct. 15, 1990 (90-84); in our yard, 607 Lucas Dr., Aug. 1, 1993 (93-25); and along Stroubles Ck. near beef cattle barn, July 4, 1994 (94-11); from White Top Mt., Grayson Co., Aug. 14, 1994 (94-34); on Rt. 43, 5 mi. E. of Buchanan, Botetourt Co., Aug. 24, 1994 (94-39); from Blue Ridge Mountain Council Boy Scout Headquarters, Roanoke Co., Mar. 27, 1991 (91-5). A collection on 3 came from the W. D. Edwards farm, Westmoreland Co., May 1983 (83-Fm-1), (NR,U); on 5, near superintendent's house, Claytor Lake S.P., Pulaski Co., May 30, 1991 (91-24), (NR,U); on 6 along the Blue Ridge Pkwy., Floyd-Patrick Co. line, near Mabry Mill, May 23, 1993 (93-6). (NR,U). It occurred on 7 along the Blue Ridge Pkwy. in Carroll, Floyd, and Patrick Cos., June 18, 1995 (95-20). Farr et al. (1989) also report 7 as a host in Virginia.

*Phaeoseptoria festucae* Sprague was collected on 2 along Stroubles Ck., near the beef cattle barns, V.P.I. & S.U., Montgomery Co., July 4, 1994 (94-11). A variety, *P. festucae* var. *andropogonis* is listed on *F. subulata* Trin. but our collection best fits *P. festucae* var. *muhlenbergia*, based on Sprague's (1950) descriptions and illustrations. Spores were 60-70 X 3.5-4.0  $\mu\text{m}$  with 7-9 septa. Another collection from the cabin area, Claytor Lake S.P., Pulaski Co., Mar. 10, 1991, with 6-8-septate spores measuring 58-70 X 3-5  $\mu\text{m}$  (91-2), had very yellow-brown spores when extruded into water but which faded to pale yellow. In his key, Sprague uses color to separate the taxa. It appears that the pigment is water soluble and therefore is not a useful character. However, based on morphologic traits, *P. festuca* was collected. (NR,U).

*Phyllosticta arundinacea* (Berk.) Sacc. was collected on 4 at the Audie Murphy crash site, Brush Mt. along the Roanoke-Craig line, June 19, 1994 (94-15). Only *Phyllosticta* sp. and *Phoma* sp. are listed on aerial plant parts by Farr et al. (1989). Our determination is based on descriptions by Ellis & Ellis (1985). (NR,U).

*Phyllosticta helenae* Sprague, having biguttulate spores measuring 5-7 X 2.0-2.5  $\mu\text{m}$ , occurred on 3 collected on the lake shore near the picnic area of Claytor Lake S.P., Pulaski Co., June 17, 1990 (90-35). This fungus is known only from *Glyceria occidentalis* in Idaho. *Phyllosticta* and *Phoma* spp. are represented by numerous confusing taxa; thus, we may have erred. Nevertheless, our collection fits the description of *P. helenae* given by Sprague (1950). (NR,U).

*Stagnospora montagnei* Castellani & Germano = *S. graminella* (Sacc.) Sacc. occurred on dead leaves of 2 in the cabin area near the shore, Claytor Lake S.P., Pulaski Co., Sept. 9, 1991 (91-81). Spores measured 18-22 X 4-5  $\mu\text{m}$ . Identity is based on descriptions by Sprague (1949, 1950). (NR,U).

*Stagonospora nodorum* (Berk.) Castellani & Germano occurred on 2 along Lucas Dr., Blacksburg, Montgomery Co., Nov. 9, 1981 (81-Fe-1). Pycnidia measured 200  $\mu\text{m}$  diam., the 3-septate spores measured 27-35 X 2-3  $\mu\text{m}$ . It also occurred on 2 in the cabin area, Claytor Lake S.P., Mar. 10, 1991 on overwintered stems and leaves (91-2). Spores in this collection measured 17-20 X 2-3  $\mu\text{m}$ . Sprague (1950) describes this as a variable species which is difficult to distinguish from other graminicolous species. *S. nodorum* is common in our area on several hosts. (NR,EU).

*Sphaerellopsis filum* (Bev.-Bern. ex Fr.) Sutton, widely known as *Darluca filum*, while not a graminicolous fungus, is a hyperparasite of rust fungi and therefore

frequently occurs on grasses. It occurred on 2 in uredial sori of *Puccinia graminis* collected in the cabin area of Claytor Lake S.P., Pulaski Co., Sept. 9, 1991.

#### Deuteromycotina-Other:

*Rhizoctonia solani* Kühn causes a bright tan leaf spot of 2 and is widespread in Virginia. We have collections from the Kipps Farm, Blacksburg, Montgomery Co., Aug. 1960 (60-Fe-1), Sept. 10, 1982 (82-Fe-3); and from Goodwins Ferry, Giles Co., Aug. 5, 1989 (89-26). It has been observed in several areas of Claytor Lake S.P., Pulaski Co., and is frequently sent in on 2 for diagnosis in the V.P.I. & S.U. Plant Clinic. It caused long bleached lesions on 7 in several areas along the Blue Ridge Pkwy. in Carroll, Floyd, and Patrick Cos. on June 8, 1995 (95-20). Farr et al. (1989) also report it on 7 from Virginia.

#### *Glyceria melicaria* (Michx.) Hubb.

Roane (1991) lists nine species of *Glyceria* as occurring in Virginia. They occur mostly in wet or boggy areas. We have encountered only *G. melicaria*; it is not listed by Farr et al. (1989).

#### Basidiomycotina-Uredinales:

*Puccinia recondita* Roberge ex Desmaz., II, occurred at the picnic area, Fairy Stone S.P., Patrick Co., May 23, 1993 (93-3). (NR,U).

#### Deuteromycotina-Coelomycetes:

*Amerosporium atrum* (Fuckel) Höhn was also present in the collection above (93-3). The pale brown fusiform spores measured 9-11 X 2.0-2.5  $\mu\text{m}$ . It is described and illustrated as *A. polynematoides* by Sutton (1980, p. 619-620). (NR,U).

*Ascochyta brachypodii* (Sydow) Sprague & Johnson, a controversial taxon, or possibly *A. hordei* Hara, having characters overlapping with *A. brachypodii*, associated with small (1 X 3 mm), purple, elliptical leaf spots, was collected at the outlet stream of Mt. Lake, along Rt. 613, Giles Co., May 26, 1991 (91-17). (NR,U).

*Ascochyta sorghi* Sacc. occurred on basal leaves collected at the Audie Murphy crash site parking lot, Brush Mt., Roanoke-Craig Co. line, June 19, 1994 (94-12). Spores measured 11-14 X 2.5-4.0  $\mu\text{m}$ . (NR,U).

*Stagonospora foliicola* (Bres.) Bubák was associated with *A. sorghi* from the collection above (94-12). The usually 8-septate spores measured 26-34 X 3-4  $\mu\text{m}$ . (NR,U).

*Stagonospora nodorum* (Berk.) Castellani & Germano was collected at the Mt. Lake site above (91-17). Spores were 3-septate, measured 17-28 X 3.0-3.5  $\mu\text{m}$ , and were slightly constricted at the septa. (NR,U).

#### *Holcus lanatus* L., velvetgrass

#### Ascomycotina:

*Claviceps purpurea* (Fr.:Fr.) Tul., ergot, was present in inflorescences of velvetgrass collected on White Top Mt. (about 4900'), Grayson Co., Aug. 14, 1994 (94-33). Farr et al. (1989) list it only in Washington and Oregon. (NR,EU).

*Phaeosphaeria herpotrichoides* (De Not.) L. Holm was fruiting on senescent leaves and stems of the White Top Mt. collection (94-33). Ascospores were mostly 7-septate,

24-26 X 4-6  $\mu\text{m}$ . Although it is a plurivorous fungus, it has not been found previously on *H. lanatus* (Farr et al., 1989). (NR,U).

#### Basidiomycotina-Uredinales:

*Puccinia coronata* Cda., crown rust occurred in a stand on Merrimac Rd., opposite the rear entrance to the hospital, Blacksburg, Montgomery Co., July 6, 1989 (89-HI-2). It is reported from North Carolina and West Virginia but not Virginia (Farr et al., 1989). (NR,V).

#### Deuteromycotina-Coelomycetes:

*Colletotrichum gramnicola* (Ces.) G. W. Wils. was present in the Merrimac Rd. collection (89-HI-2), the White Top Mt. collection (94-33), and at the marina cove, Claytor Lake S.P., Pulaski Co. Aug. 26, 1992 (92-22). Though reported from Maryland and West Virginia, it has not been reported from Virginia (Farr et al., 1989). (NR,V).

*Dilophospora alopecuri* (Fr.:Fr.) Fr., causing twist, was present in the White Top Mt. collection (94-33). It is reported on *H. lanatus* only from western states (Farr et al., 1989). (NR,EU).

*Phaeoseptoria urvilleana* (Speg.) Sprague, a saprophyte on grasses, occurred in the White Top Mt. collection (94-33). Farr et al. (1989) do not list this fungus; it is listed by Sprague (1950). (NR,U).

#### *Hordeum pusillum* Nutt., little barley

#### Deuteromycotina-Hyphomycetes:

*Curvularia geniculata* (Tracy & Earle) Boed. fruited on leaves collected in the U.S. 29 median strip at Rt. 610, Amherst Co., May 17, 1995 (95-12). (NR,EU).

#### Deuteromycotina-Coelomycetes:

*Colletotrichum gramnicola* (Ces.) G. W. Wils., anthracnose, was present in the Amherst collection above (95-12). (NR,V).

#### *Hystrix patula* Moench, bottlebrush grass

#### Ascomycotina:

*Mycosphaerella recutita* (Fr.:Fr.) Johans. was collected in Little Montgomery, along Rt. 613 near Little R., Montgomery Co., July 16, 1989 (89-Hp-4c); and in our backyard, 607 Lucas Dr., Blacksburg, Montgomery Co., Oct. 16, 1981 (81-Hp-2). Ascospores were 1-3 septate, mostly 1-septate, 14 X 3-4  $\mu\text{m}$ . (NR,U).

*Phaeosphaeria herpotrichoides* (De Not.) L. Holm occurred on leaves collected at Craig Ck. Recreation Area, Oriskany, Botetourt Co., July 24, 1994 (94-23); and at White Top Mt. (4500') Grayson Co., Aug. 14, 1994 (94-31). No *Phaeosphaeria* spp. are listed on *Hystrix* by Farr et al. (1989). (NR,U).

*Phaeosphaeria nigrans* (Roberge ex Desmaz.) L. Holm was collected on Rt. 860, between Blue Ridge Pkwy. and Endicott, Franklin Co., July 9, 1989 (89-Hp-3). The fungus is described by Shoemaker & Babcock (1989). (NR,U).

*Phyllachora graminis* (Pers.:Fr.) Nitschke occurs at every location we encounter *H. patula*. Collections are from Craig Ck. Recreation Area, Oriskany, Botetourt Co., July 24, 1994 (94-23); along Big Reed Island Ck., Carroll Co., July 4, 1991 (91-61); along Sinking Ck., near Rt. 700, Giles Co., Nov. 14, 1981 (81-Hp-1); in our backyard,

607 Lucas Dr., Blacksburg, Montgomery Co., Oct. 16, 1981 (81-Hp-2); July 26, 1983 (83-Hp-1); Sept. 10, 1989 (89-55); Jan. 3, 1992 (92-3); and along Rt. 613, Little Montgomery, Montgomery Co., July 16 and Aug. 4, 1989 (89-Hp-4a, 89-Hp5); at entrance to the cabin area, Claytor Lake S.P., Pulaski Co., Nov. 3, 1985 (85-Hp-1). Orton (1944) lists several Virginia grasses as hosts for this fungus.

#### Basidiomycotina:

*Puccinia recondita* Roberge ex Desmaz., II, III, has been collected along Big Reed Island Ck., Carroll Co., July 4, 1991 (91-61); along Rt. 860 between the Blue Ridge Pkwy. and Endicott, Franklin Co., July 9, 1989 (89-Hp-3); along Rt. 613, Little Montgomery, Montgomery Co., July 16, 1989 (89-Hp-4a,-4c); and Aug. 4, 1989 (89-Hp-5) and in our yard, Blacksburg, Montgomery Co., Oct. 16, 1981 (81-Hp-2). The fungus is widespread on *H. patula* in Virginia.

#### Deuteromycotina-Hyphomycetes:

*Bipolaris sorokiniana* (Sacc.) Shoem. was collected at the entrance to the cabin area, Claytor Lake S.P., Pulaski Co., Nov. 3, 1985 (85-Hp-1). It was reported previously only from Minnesota (Farr et al., 1989). (NR,EU).

*Fusarium sambucinum* Fuckel was associated with *Phyllachora graminis* collections from Blacksburg (81-Hp-2) and Little Montgomery (89-Hp-4a) listed above. The fungus was identified at the Fusarium Laboratory, Pennsylvania State University by Paul Nelson. (NR,U).

#### Deuteromycotina-Coelomycetes:

*Ascochyta sorghi* Sacc. was present in the July 16, 1989 collection from Little Montgomery (89-Hp-4a,-4b). It is reported by Farr et al. (1989) only from Wisconsin based on a report by Greene (1949) who assigned it to *A. graminicola*. (NR,EU).

*Colletotrichum graminicola* (Ces.) G. W. Wils., the anthracnose fungus, has been collected on *H. patula* only once, i.e., at the Craig Ck. Recreation Area, Oriskany, Botetourt Co., July 24, 1994 (94-23). This ubiquitous graminicolous fungus is not listed on *H. patula* by Farr et al. (1989). (NR,U).

*Phaeoseptoria urvilleana* (Speg.) Sprague was collected at White Top Mt., 1 mi. W. of Rt. 600, Grayson Co., Aug. 14, 1994. The genus is separated from *Septoria* in a key by Sprague (1950) by having colored broader spores. It is saprophytic according to Sprague. This species is not listed by Farr et al. (1989). (NR,U).

*Stagonospora avenae* (Frank) Bissett, associated with leaf spots, was collected at Craig Ck. Recreation Area, Oriskany, Botetourt Co., July 24, 1994 (94-23); along Big Reed Island Ck., Carroll Co., July 4, 1991 (91-61); and at Little Montgomery, Montgomery Co., along Rt. 613, July 16, 1989 (89-Hp-4b). Spores measured 30-43 X 3-4  $\mu\text{m}$ . (NR,U).

*Stagonospora montagnei* Castellani & Germano (= *S. graminella*), considered to be a saprophyte, occurred on plants collected on the forest service road 1 mi. from Rt. 600, White Top Mt., Grayson Co., Aug. 14, 1994 (94-31). Black pycnidia had 3-septate spores measuring 18-21 X 3-5  $\mu\text{m}$ . (NR,U).

*Stagonospora nodorum* (Berk.) Castellini & Germano, associated with leaf spots, was collected on Rt. 860 between the Blue Ridge Pkwy. and Endicott, Franklin Co.,

July 9, 1989 (89-Hp-3). The fungus is reported on *H. patula* only from Minnesota (Farr et al., 1989). (NR,EU).

*Leersia* spp., ricegrass

- 1 *L. oryzoides* (L.) Swartz, rice cutgrass.
- 2 *L. virginica* Willd., whitegrass.

Ascomycotina:

*Phaeosphaeria fuckelii* (Niessl) L. Holm occurred on dead leaves and wilted leaf tips of 2 collected along Va. 16 at the lake shore, Hungry Mother S.P., Aug. 29, 1989 (89-70). It was identified with the aid of keys by Shoemaker & Babcock (1988). (NR,U).

Basidiomycotina-Ustilaginales:

*Tilletia corona* Lams.-Scrib. in Tracy & Earle, seed smut, is listed by Farr et al. (1989) as on 1 in Virginia.

Deuteromycotina-Hyphomycetes:

*Bipolaris leersiae* (Atk.) Shoem. was associated with leaf spots on 1 at the superintendent's cove, Claytor Lake S.P., Pulaski Co., Sept. 16, 1995 (95-37), (NR,U); and on 2 at the marina cove, Claytor Lake S.P., Sept. 14, 1990 (90-76). (NR,V).

Deuteromycotina-Coelomycetes:

*Ascochyta sorghi* Sacc. occurred on 1 at the superintendent's cove, cited above (95-37). No *Ascochyta* spp. are listed on *Leersia* spp. by Farr et al. (1989). (NR,U).

*Leptochloa fascicularis* (Lam.) A. Gray, sprangle top

This grass is known from brackish swamps of the coastal plain but we found a specimen at Montgomery Tunnels, Montgomery Co., July 22, 1995, which was identified by T. F. Wieboldt, Massey Herbarium, V.P.I. & S.U. All fungi are from that collection.

Deuteromycotina-Hyphomycetes:

*Bipolaris cynodontis* (Marignoni) Shoem., associated with a leaf spot, was also present on nearby *Cynodon dactylon* (95-30). (NR,U).

*Periconia byssoides* Pers. fruited on incubated leaves (95-30). (NR,U).

*Stemphylium botryosum* Wallr. fruited on incubated leaves (95-30). (NR,U).

*Amerosporium atrum* (Fuckel) Höhn fruited on incubated leaves (95-30). (NR,U).

*Lolium* spp., ryegrass

- 1 *L. multiflorum* Lam., annual or Italian ryegrass.
- 2 *L. perenne* L., perennial ryegrass.

Ascomycotina:

*Claviceps purpurea* (Fr.:Fr.) Tul., ergot, was collected on the point between the superintendent's residence and the cabins, Claytor Lake S.P., Pulaski Co., Aug. 6, 1992 (92-15). It has long been known in Virginia.

## Basidiomycotina-Uredinales:

*Puccinia coronata* Cda. II, crown rust, is common on *Lolium* spp. in western Virginia. Collections are on 1 from the cabin area, Claytor Lake S.P., Pulaski Co., Sept. 8, 1991 (91-85); on 2 in lawns in Blacksburg, Montgomery Co., Sept.-Oct. 1962 (62-Lp-1); on 2 in various areas, Claytor Lake S.P., Pulaski Co., Oct. 1, 1995 (95-41). (NR,V).

## Deuteromycotina-Hyphomycetes:

*Drechslera siccans* (Drechl.) Shoem. associated with a leaf spot on 2, was sent to the Plant Clinic (no. 83-198) from a strip mining reclamation plot, Dickinson Co., Mar. 25, 1983 (83-Lp-1). It is widely present in Virginia.

*Pyricularia grisea* (Cooke) Sacc., causing gray spot on 1 came from Claytor Lake S.P., cited above (91-85). (NR,U).

*Volutella ciliata* (Alb. & Schw.) Fr. fruited on incubated specimens of 2 collected in the parking area, Price Hall, V.P.I. & S.U., July 2, 1990 (90-49). (NR,U).

## Deuteromycotina-Coelomycetes:

*Ascochyta desmazieresii* Cavara, occurred on the Dickinson Co. sample of 2 cited above (83-Lp-1). (NR,EU).

*Ascochyta sorghi* Sacc., associated with leaf spots, was collected on 1 in the Market Square area near U.S. 460 Christiansburg, Montgomery Co., June 24, 1994 (94-13); and on 2 collected in the Price Hall parking area, V.P.I. & S.U., Montgomery Co., July 2, 1990 (90-49). (NR,U).

*Colletotrichum graminicola* (Ces.) G. W. Wils., causing anthracnose, occurred on 1 collected in the cabin area, Claytor Lake S.P., Pulaski Co., Sept. 8, 1991 (91-85); and in the Market Square area, off U.S. 460, cited above (94-13) (NR-V); and on 2 collected in the Price Hall parking lot cited above (90-49) and at the entrance to the picnic parking area of Claytor Lake S.P., Pulaski Co., Oct. 1, 1995. (NR,V).

## Deuteromycotina-other:

*Rhizoctonia solani* Kühn, the cause of brown patch, is listed by Farr et al. (1989) as occurring on 1 and 2 in the range of the hosts. Therefore, it must occur on 1 and 2 in Virginia. We have not encountered it.

***Miscanthus sinensis* Anderson var. *zebrinus* Beal, banded Eulalia or banded Chinese ornamental grass**

Although *M. sinensis* is a common ornamental grass, we have made only one collection. Farr et al. (1989) do not even include it. Our collection comes from a residential area north of the Blacksburg High School, Montgomery Co., Oct. 25, 1995 (95-47).

## Deuteromycotina-Hyphomycetes:

*Bipolaris sorokiniana* (Sacc.) Shoem. fruited on incubated leaves. (NR,U).

*Curvularia lunata* (Wakker) Boed. also fruited on incubated leaves. Spores measured 21-23 X 6-8  $\mu\text{m}$ , somewhat narrow for *C. lunata* but closest to this taxon. (NR,U).

*Stemphylium botryosum* Wallr., a weak parasite and common saprophyte, fruited on incubated leaves. (NR,U).

## Deuteromycotina-Coelomycetes:

*Phoma sorghina* (Sacc.) Boer., Doren., and Van Kest. was fruiting in obscure lesions. Spores measured 4.5-5.0 X 2.0-2.5  $\mu\text{m}$ . (NR,U).

*Muhlenbergia* spp., muhly grasses

- 1 *Muhlenbergia mexicana* (L.) Trin., wirestem muhly.
- 2 *M. schreberi* Gmel., nimblewill.
- 3 *M. sobolifera* (Muhl.) Trin., branched muhly.
- 4 *M. sylvatica* (Torr.) Torr., woodland muhly.
- 5 *M. tenuiflora* (Willd.) B.S.P., slender-flower muhly.

## Ascomycotina:

*Phaeosphaeria nigrans* (Roberge ex Desmaz.) L. Holm. occurred on wilted leaves of 5 having tar spot (see below) collected on the lake-ridge trail, Hungry Mother S.P., Smyth Co., Sept. 3, 1989 (89-50). (NR,U).

*Phomatospora dinemasporium* J. Webster fruited on incubated leaves of 2 collected in our yard, 607 Lucas Drive, Blacksburg, Montgomery Co., Oct. 25, 1983 (83-Ms-1). (NR,U).

*Phyllachora vulgata* Theiss. & Sydow, tar spot, occurred on 2 in our yard, Montgomery Co., Oct. 3, 1980 (80-Ms-1); Aug. 30, 1983 (83-Ms-3); in the cabin area on overwintering plants Feb. 22, 1992 (92-4a) and north of the picnic parking area, Claytor Lake S.P., Pulaski Co., Oct. 1, 1995 (95-40); on 5 on the lake-ridge trail, Hungry Mother S.P., Smyth Co., Sept. 3, 1989 (89-50). Although listed as in Pennsylvania and West Virginia on 2 by Farr et al. (1989) it is new to Virginia (NR,V); they do not list any occurrence on 5. (NR,U).

## Basidiomycotina-Uredinales:

*Puccinia schedonnardi* Kell. & Swing., II, III, rust, was reported on 2 in the Mt. Lake area, Giles Co., Sept. 3-5, 1936, by the foray compiler, D. H. Linde, Mycological Soc. of Amer. (Mycologia, 1937); it occurred in our yard, Blacksburg, Montgomery Co., Nov. 2, 1983 (83-Ms-2) and again Nov. 11, 1989 (89-73); and at the picnic area, Claytor Lake S.P., Pulaski Co., Aug. 2, 1989 (89-Ms-1). Farr et al. (1989) report it on 2 from North Carolina (NR,V). They also report it on 3 from Virginia.

## Basidiomycotina-other:

*Melanotus phillipsii* (Berk. & Broome) Singer, a mushroom (Agaricales) occurred on 2 in our yard, July 27, 1994 (94-22). It apparently killed the foliage on which it grew. In the same patch, *Festuca ovina* and *Poa pratensis* were also colonized. Farr et al. (1989) do not list *M. phillipsii*; the fungus is described and illustrated by Smiley et al. (1992). (NR,U).

## Deuteromycotina-Hyphomycetes:

*Bipolaris cynodontis* (Marignoni) Shoem., causing leaf blotch and glume blotch, has been collected on 2 in our yard, Blacksburg, Montgomery Co., Nov. 25, 1983 (83-Ms-1) and Nov. 11, 1989 (89-73); near West Campus Drive, V.P.I. & S.U., Montgomery Co., Nov. 2, 1989 (89-71,-72); in the cabin area, Claytor Lake S.P., Pulaski Co., on overwintered plants, Mar. 10, 1991 (91-3) and Feb. 22, 1992 (92-4a); at Keswick, Albemarle Co., Mar. 23, 1995 (95-5, Plant Clinic no. 95-196). (NR,U).

A collection on 4 came from the ridge of Brush Mt., 1 ½ mi. W. of U.S. 460, Montgomery Co., Oct. 22, 1990. (NR,U). Farr et al. (1989) list it as on 1 in Virginia.

*Curvularia lunata* (Wakker) Boed. fruited on foliage of 2 collected at Keswick, Albemarle Co., Mar. 23, 1995 (95-5, Plant Clinic no. 95-196) and on foliage collected near West Campus Dr., V.P.I. & S.U., Montgomery Co., Nov. 2, 1989 (89-71). (NR,U).

*Nigrospora sphaerica* (Sacc.) E. Mason appeared on incubated leaves of 2 collected north of the picnic area, Claytor Lake S.P., Pulaski Co., Oct. 1, 1995 (95-40). (NR,U). It also appeared on leaves of 4 collected on the ridge of Brush Mt., 1 ½ mi. W. of U.S. 460, Montgomery Co., Oct. 22, 1990 (90-79). (NR,U).

*Periconia britannica* M. B. Ellis, or a closely related species, fruited on dead foliage of 2 collected near West Campus Drive and Solitude (house) Nov. 9, 1989 (89-72). It fits closely the description and illustration by Ellis & Ellis (1985). (NR,U).

*Tetraploa ellisii* Cooke fruited on foliage of 2 collected in our yard, Blacksburg, Montgomery Co., Nov. 25, 1983 (83-Ms-1). (NR,U).

*Volutella ciliata* (Alb. & Schw.) Fr., a species with hyaline, thick-walled setae, and slimy spore masses of hyaline conidia measuring 5-8 X 2 µm, fruited on overwintered foliage of 2 from Keswick, Albemarle Co., collected Mar. 23, 1995 (95-5). The only description we could find is given by Ellis & Ellis (1985, p. 298). (NR,U).

#### Deuteromycotinia-Coelomycetes:

*Amerosporium atrum* (Fuckel) L. Holm fruited on foliage of 2 collected north of the picnic area, Claytor Lake S.P., Pulaski Co., Oct. 1, 1995 (95-40). A brief description of *A. atrum* is given by Ellis & Ellis (1985) and an illustration and characteristics in a key are given by Arx (1981). (NR,U).

*Ascochyta sorghi* Sacc. occurred on overwintered plants of 2 from Keswick, Albemarle Co., Mar. 23, 1995 (95-5, Clinic no. 95-196). (NR,U).

*Colletotrichum graminicola* (Ces.) G. W. Wils. occurred on overwintered plants of 2 collected in the cabin area, Claytor Lake S.P., Pulaski Co., Feb. 22, 1992 (92-4b). (NR,U).

*Phyllosticta minutaspora* Sprague, having pycnidia in narrow black lines and spores measuring 3-4 X 0.5 µm, was collected on overwintered plants of 2 in the cabin area of Claytor Lake S.P., Pulaski Co., Mar. 10, 1991 (91-3). Sprague (1950) found it originally on *M. filiformis* in Idaho. (NR,U).

*Sphaerellopsis filum* (Biv.-Bern. ex Fr.) Sutton, a hyperparasitic of rusts was reported on 2 on *Puccinia schedonnardi* uredinia, collected during the Mycological Society of America foray at Mt. Lake, Giles Co., Sept. 3-5, 1936.

*Stagonospora montagnei* Castellani & Germano, considered to be a saprophyte, occurred on overwintered plants of 2 at the cabin area of Claytor Lake S.P., Feb. 22, 1992 (92-4a). Farr et al. (1989) include this taxon giving *S. graminella* (Sacc.) Sacc. as a synonym. The characteristics are derived from the key to *S. graminella* in Sprague (1950). (NR,U).

*Stagonospora ischaemi* (Sacc.) Sacc. occurred on overwintered plants of 2 in the town park, Blacksburg, Montgomery Co., Mar. 6, 1990 (90-4). Spores were typical of those described and illustrated by Sprague (1950). (NR,U).



*Oryza sativa* L., upland rice

Farr et al. (1989) list *Leptosphaerulina trifolii* (Rostr.) Petr., an Ascomycete, as occurring on glumes and *Ascochyta oryzae* Cattaneo, a Coelomycete, as occurring on glumes and discolored glumes, culms, and leaves in Virginia. Oddly, these are the only records of these associations in the United States. We doubt if they can be reaffirmed in the future.

*Panicum* spp.

The genus *Panicum* was recently divided into *Dichantherium*, including species in that former subgenus, and *Panicum*, including the species in the subgenus *Eupanicum*. For a listing of the representatives of these genera in Virginia, see Roane (1991).

- 1 *Panicum amarulum* Hitchc. & Chase, bitter panicgrass.
- 2 *P. amarum* Ell., seaside panicum.
- 3 *P. anceps* Michx., flat-stemmed panicgrass.
- 4 *P. capillare* L., witchgrass.
- 5 *P. dichotomiflorum* Michx., fall panicum.
- 6 *P. virgatum* L., switchgrass.
- 7 *P. spp.* (unidentified).

## Plasmodiophoromycetes:

*Polymyxa graminis* Ledingham occurred in the roots of 5 collected at Broadus Flats, near U.S. 360, Hanover Co., Aug. 1983 (83-Pd-1). (NR,U).

## Ascomycotina:

*Balansia henningsiana* (A. Moller) Diehl, causing black ring, is reported on 6 by Farr et al. (1989) and originally by Diehl (1950). The locality from which Diehl collected this fungus in Virginia is not given in the monograph.

*Balansia strangulans* (Mont.) Diehl is listed by Farr et al. (1989) as on *Panicum* spp. However, all the hosts of *B. strangulans* listed by Diehl (1950) are now consigned to *Dichantherium*.

*Myriogenospora atramentosa* (Berk. & Curtis) Diehl, causing black crust, is reported on 3 by Farr et al. (1989).

*Phyllachora punctum* (Schw.) Orton & Stevens, tar spot, is listed on several *Panicum* spp. by Farr et al. (1989). All of these are now consigned to *Dichantherium*.

## Basidiomycotina-Uredinales:

*Puccinia emaculata* Schw. rust, was collected on 2 on the ocean beach, Lynnhaven Inlet, Virginia Beach, Nov. 29, 1985 (85-Pa-1). Arthur (1934) also gives 2 as a host in Virginia. It is listed by Farr et al. (1989) on 4 in eastern states and on 7 in Virginia.

*Uromyces graminicola* Burrill, rust, is listed by Farr et al. (1989) on 6 in eastern states and on 7 in Virginia. Arthur (1934) lists 1 as a host in Virginia.

## Basidiomycotina-Ustilaginales:

*Sporisorium cenchrri* (Lagerh.) K. Vánky, inflorescence smut, is prevalent every year in Montgomery Co. on 5. We have a collection (92-23) from Crockett, Wythe Co., Aug. 6, 1992. It is widespread in eastern states (Farr et al., 1989).

## Dueteromycotina-Hyphomycetes:

*Bipolaris sorokiniana* (Sacc.) Shoem. was collected on seedlings of 6 at the Kipps Farm, V.P.I. & S.U., Montgomery Co., June 24, 1986 (86-Pv-1). It caused leaf spot and blight on 6 at the Piedmont Research Station, Orange Co., Aug. 8, 1989 (89-28). (NR,V).

*Phaeoramularia fusimaculans* (Atk.) X. Lui & Guo (formerly *Cercospora fusimaculans* Atk.), causing leaf spot, occurred on 5 in a corn field, Dickinson Co., July 16, 1991 (91-69). (NR,V). See Chupp (1953) for a description.

## Deuteromycotina-Coelomycetes:

*Colletotrichum graminicola* (Ces.) G. W. Wils., anthracnose, was collected on 3 at the head of the picnic cove, Claytor Lake S.P., Pulaski Co., Sept. 25, 1990 (90-78a), (NR,U), and was sent to the Plant Clinic on 6 from the State Forestry Nursery, Williamsburg, James City Co., Aug. 22, 1994 ((94-37). (NR,V).

*Phoma sorghina* (Sacc.) Boer., Doren., & Van Kest., associated with irregular tan spots with purple margins occurred on 6 at the Kipps Farm (in 1985, the V.P.I. & S.U. Agronomy Farm), Montgomery Co., July 19, 1985 (85-Pv-1). It is reported from Florida and Kansas (Farr et al., 1989). (NR,V).

*Septoria arechavaletae* G. Wint. is reported on 4 from Virginia and Argentina by Sprague (1950), who traces the Virginia specimen back to David Fairchild's collections. Farr et al. (1989) report this fungus from Virginia and Uruguay and refer to Sprague. Thus, there is a slight inconsistency. We found it on *Dichanthium dichotomum* (Roane & Roane, 1996).

*Sphaerellopsis filum* (Biv.-Bern. ex Fr.) Sutton a hyperparasite of rusts, occurred in uredia of the rust on 2 collected at Lynnhaven Inlet, Virginia Beach, Nov. 29, 1985 (85-Pa-1). (NR,V).

*Paspalum* spp.

Roane (1991) lists 22 *Paspalum* spp. as occurring in Virginia. Farr et al. (1989) list fungi on four additional species of which *P. conjugatum* is a southern species; *P. intermedium* is reported by Hitchcock (1950) as an escape at Tifton, Ga.; *P. quadrifarium* is not listed by Hitchcock; and *P. stramineum* is a midwestern U.S.A. species which was a variety of *P. ciliatifolium* in Britton & Brown (Gleason, 1952). No doubt, these species were grown and observed in experimental nurseries at Arlington Farm, the research farm for the U.S. Dept. of Agriculture before World War II. These dubious representatives of Virginia grass flora are appended to our numbered list below.

- 1 *Paspalum ciliatifolium* Michx., fringed leaf paspalum.
- 2 *P. dilatatum* Poir., Dallis grass.
- 3 *P. distichum* L., knotgrass.
- 4 *P. floridanum* Michx., Florida paspalum.
- 5 *P. laeve* Michx., smooth or field paspalum.
- 6 *P. longipilum* Nash, long-haired paspalum.
- 7 *P. pubescens* Muhl., hairy paspalum.
- 8 *P. pubiflorum* Rupr. ex Fourn., hairy-seeded paspalum.
- 9 *P. supinum* Bosc. ex Poir.  
From Farr et al. (1989) only:
- 10 *P. conjugatum* Bergius, sourgrass.

- 11 *P. intermedium* Munro ex Morong & Britton.  
 12 *P. quadrifarium* Lam.  
 13 *P. stramineum* Nash.

#### Ascomycotina:

*Balansia epichloe* (Weese) Diehl, black crust, is reported on 1 by Farr et al. (1989). Sprague (1950) lists this fungus as *Dothichloë limitata* Diehl but Diehl (1950) transferred it to *B. epichloë* shortly after Sprague's book appeared.

*Balansiosis pilulaeformis* (Berk. & Curtis) Diehl, black choke, is reported on 1 and an unspecified *Paspalum* by Farr et al. (1989).

*Claviceps paspali* Stevens & Hall, ergot, has been collected only on 2 and 5. On 2 it occurred in the cabin area, Oct. 3, 1982 and in subsequent years (82-Pd-1a) and north of the picnic parking area, Claytor Lake S.P., Pulaski Co., Oct. 1, 1995 (95-39). It is common in the range of 2. It was submitted to the Plant Clinic on 5 by the Nelson Co. Agricultural Agent, Oct. 12, 1995 (95-45). Farr et al. (1989) list as hosts 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, and 12.

*Phyllachora paspalicola* Henn., tar spot, is listed on 7 by Farr et al. (1989). We found it at the Devils Backbone overlook, Blue Ridge Pkwy. (about mile post 145) Franklin-Floyd Co. line, Aug. 30, 1992 (92-19).

#### Basidiomycotina-Uredinales:

*Puccinia substriata* Ellis & Barth. is reported on 13 by Farr et al. (1989).

#### Deuteromycotina-Hyphomycetes:

*Bipolaris specifera* (Bainier) Subram., associated with bright tan spots on 5 collected along Stroubles Ck. bank between W. Campus Dr. and the duck pond, V.P.I. & S.U., Montgomery Co., Oct. 5, 1994 (94-64). (NR,U).

*Curvularia geniculata* (Tracy & Earle) Boed. fruited on leaves of 4 from Adner, Gloucester Co., Nov. 25, 1982 (82-Pf-1a). (NR,U). It was also present on the Stroubles Ck. collection of 5 above (94-64). (NR,U).

*Curvularia lunata* (Wakker) Boed., was associated with purple leaf spots of 1 from Adner, Gloucester Co., Sept. 25, 1989 (89-52). (NR,U). It appeared to cause purple-margined eyespots on leaves of 6 at the picnic parking area, Fairy Stone S.P., Patrick Co., May 23, 1993 (93-4) and again on July 24, 1994 (94-17). (NR,U).

*Curvularia protuberata* Nelson & Hodges was present on dead basal plant parts of 2 from Adner, Gloucester Co., June 24, 1991 (91-49). (NR,U).

*Curvularia trifolii* (Kauffm.) Boed., occurred on incubated leaves of 4 along U.S. 58 near Rt. 867, Patrick Co., Sept. 25, 1994 (94-54). (NR,U).

*Nigrospora sphaerica* (Sacc.) E. Mason fruited on incubated leaves of 1 from Adner, Gloucester Co., Sept. 25, 1989 (89-52), (NR,U); and on 4 from the Patrick Co., area above (94-54). (NR,U).

*Stemphylium botryosum* Wallr. fruited on incubated leaves of 1 from Adner, Gloucester Co., Sept. 25, 1989 (89-52). (NR,U).

*Tetraploa aristida* Berk. & Broome fruited on 4 collected E. of the road to Critz along U.S. 58, Patrick Co., Aug. 19, 1991 (91-77), (NR,U); and on leaves of 5 collected along Stroubles Ck. near the V.P.I. & S.U. duck pond, Montgomery Co., Oct. 5, 1994. (NR,U).

## Deuteromycotina-Coelomycetes:

*Colletotrichum graminicola* (Ces.) G. W. Wils., anthracnose, has been collected on 2, 4, and 5. On 2, we collected it at Adner, Gloucester Co., June 24, 1991 (91-46) and north of the picnic parking area Claytor Lake S.P., Pulaski Co., Oct. 1, 1995 (95-39). (NR,V). We found it on 4 causing large, oval or diamond-shaped, tan lesions with brown margins, on blades and sheaths which sometimes penetrated in culms. The collection came from east of Patrick Springs along U.S. 58, Patrick Co., Sept. 25, 1994 (94-54). (NR,U). It occurred on 5 at the Dixie Caverns exit, I-81, Roanoke Co., Oct. 29, 1989 (89-62) where it girdled some culms at the base and killed inflorescences on girdled culms. (NR,U).

*Phyllosticta healdii* Sprague was apparently damaging foliage of 5 collected at the Dixie Caverns site, Roanoke Co., Oct. 29, 1989 (89-62). Since only the original collection on *Dichantheium huachucae* from Nebraska is known, a brief description is warranted. Pycnidia were scattered, black, measuring about 120 X 100  $\mu\text{m}$ ; spores were bacilliform to reniform, bi- or rarely triguttulate, measuring 9-13 X 4-5  $\mu\text{m}$ . (NR,U).

## Deuteromycotina-other:

*Rhizoctonia solani* Kühn, causing bright tan lesions occurred on blades of 2 at Adner, Gloucester Co., June 27, 1991 (91-46). This fungus is a common graminicolous species but is not reported on any *Paspalum* spp. (Farr et al., 1989). (NR,U).

*Pennisetum glaucum* (L.) R. Br., pearl millet

## Deuteromycotina-Hyphomycetes:

*Curvularia geniculata* (Tracy & Earle) Boed. occurred on plants sown by a contractor along a cable installation along the road to Claytor Lake S.P., Pulaski Co., Oct. 8, 1995 (95-43). (NR,V).

*Nigrospora sphaerica* (Sacc.) E. Mason was present in the collection above (95-43). (NR,U).

## Deuteromycotina-Coelomycetes:

*Macrophoma phlei* Tehon & Stout, occurred on leaves from the site above (95-43). The key and text by Sprague (1950) gives two spore sizes. Our fungus fits within the concept of *M. phlei* described in the text, i.e., elliptical to elongate-ovate, white opaque spores, slightly wider at one end, measuring 28-39 X 8-11  $\mu\text{m}$ ; and in the key, 25 X 8.5-11.0  $\mu\text{m}$  as on *Elymus* and *Agrostis*, but not in the key, 25 X 6.7-7.5  $\mu\text{m}$ , as on *Phleum*. Thus, we have a fungus of dubious identity. However, since no *Macrophoma* is listed on *Pennisetum* by Farr et al. (1989), we declare this to be a NR,U.

*Phalaris arundinacea* L., reed canarygrass

## Plasmodiophoromycetes:

*Polymyxa graminis* Ledingham, occurred in roots collected on the Island Farm at U.S. 360 and the Rappahannock R., Richmond Co., Apr. 26, 1983 (83-Pa-1). We have published a note about this collection (Roane & Roane, 1983). (NR,U).

## Ascomycotina:

*Phaeosphaeria eustoma* (Fuckel) L. Holm, was collected between Va. 16 and the lake shore, Hungry Mother S.P., Smyth Co., Aug. 30, 1989 (89-34). It occurred on leaves. Ascospores were olive, fusiform, 3-septate, constricted at the septa, slightly curved, measuring 17-20 X 5  $\mu$ m. For a complete description, see Shoemaker & Babcock (1989). (NR,U).

*Phaeosphaeria herpotrichoides* (De Not.) L. Holm occurred in brown leaf spots and on leaves and glumes collected at the lower edge of the grassy bald on White Top Mt., Grayson Co., Aug. 14, 1994. With broadly fusiform, 5- to 6-septate ascospores, having third cell enlarged, measuring 23-32 X 4.5-5.5  $\mu$ m, this fits best in *P. herpotrichoides* form 2 (Shoemaker & Babcock, 1989). (NR,U).

*Phaeosphaeria luctuosa* (Niessl) Otani & Mikawa occurred on glumes in the Smyth Co. collection above (89-34). Ascospores were narrowly fusiform, pale yellow, 5-septate, third cell enlarged, measuring 25-30 X 4-5  $\mu$ m. For a complete description, see Shoemaker & Babcock (1989). (NR,U).

## Deuteromycotina-Hyphomycetes:

*Drechslera gigantea* (Heald & Wolf) Ito has been collected several times at the Piedmont Research Station, Orange Co., in Oct., and the Kipps Farm (V.P.I. & S.U. Agronomy Research Farm for several years), Montgomery Co. in Sept. Specimens are in our departmental class file. Another specimen (87-Pa-1) came from a New R. island at Parrott, Montgomery-Pulaski Co. line, Aug. 1987 (NR,V).

## Deuteromycotina-Coelomycetes:

*Phoma sorghina* (Sacc.) Boer., Doren., & Van Kest. was associated with a leaf spot collected at the riverside, Goodwins Ferry, Giles Co., Aug. 5, 1989 (89-24). Spores were ellipsoid, measuring 5.5-7 X 2.5-3.5  $\mu$ m. (NR,U).

*Phyllosticta minutaspora* Sprague occurred in lenticular, tan leaf spots collected at McCoy, Montgomery Co., Oct. 6, 1984 (84-Pa-1). Spores measured 3-4 X 0.5  $\mu$ m, much smaller than for other pycnidiate fungi. For a description and illustration, see Sprague (1950). (NR,U).

*Stagonospora foliicola* (Bres.) Bubák, causing tawny blotch, is common along the New R. on banks and islands in Pulaski, Montgomery, and Giles Cos. every year (83-Pa-2, 84-Pa-1, 89-29, 91-32, 91-84, 93-8) May to Oct. and occurred along Stroubles Ck. near the beef pavillion, V.P.I. & S.U., Montgomery Co., Sept. 2, 1994 (94-48). It was collected along Va. 16, at Hungry Mother S.P., Smyth Co., Aug. 30, 1989. (NR,V).

*Stagnospora simplicior* Sacc. & Briard occurred mixed with *S. foliicola* (91-32 above) collected on an island near the power plant below Whitethorne, Montgomery-Pulaski Co. line, June 8, 1991. The two species are easily distinguished; see Sprague (1950) for descriptions and illustrations. (NR,U).

*Phleum pratense* L., timothy

Several of the records of fungi on *Phleum pratense* are from Farr et al. (1989). Others will be documented.

**Ascomycotina:**

*Claviceps purpurea* (Fr.:Fr.) Tul., ergot, is present in eastern states but is not reported from Virginia. It has been collected twice on V.P.I. & S.U. farms, Montgomery Co., July 16, 1982 (82-Pp-1) and in 1989 (89-23). (NR,V).

**Basidiomycotina-Uredinales:**

*Puccinia graminis* Pers.:Pers. subsp. *graminicola* Z. Urban, stem rust, is the taxon listed on *P. pratense* throughout its range. It was collected along Prices Fork Rd., near the Anaerobe Lab., Blacksburg, Oct. 10, 1956 (56-Pp-1) and along Stroubles Ck. near the V.P.I. & S.U. beef barns, Montgomery Co., Sept. 2, 1994 (94-47).

*Puccinia coronata* Cda., III, crown rust, was present in traces among the sori of *P. graminis* (94-47). It had been collected previously (1990) in an unknown location in Montgomery Co. (NR,V).

**Basidiomycotina-Ustilaginales:**

*Ustilago striiformis* (West.) Niessl, causing stripe smut, is found in the range of the host.

**Deuteromycotina-Hyphomycetes:**

*Cercosporidium graminis* (Fuckel) Deighton, causing brown stripe, is common in Virginia and is listed as occurring in the range of the host.

*Cladosporium phlei* (Gregory) G. A. DeVries, causing eyespot, is common in Virginia. It was collected near Groundhog Mt., Blue Ridge Pkwy., Carroll Co., June 18, 1995 (95-19).

*Drechslera triseptata* (Drechs.) Subram. & Jain, causing leaf spot, is listed only from Maryland and Virginia.

*Tetraploa aristida* Berk. & Broome fruited on incubated leaves from the Stroubles Ck. site described above (94-47). (NR,U).

**Deuteromycotina-Coelomycetes:**

*Ascochyta phleina* Sprague, associated with leaf spots and at nodes, occurred at the Stroubles Ck. site Sept. 2, 1994 (94-47). (NR,V).

*Colletotrichum graminicola* (Ces.) G. W. Wils., anthracnose, occurred in the field at the lower end of Poverty Ck., (83-Pp-1), and at the Stroubles Ck. site described above (94-47), both from Montgomery Co. (NR,V).

*Phoma sorghina* (Sacc.) Boer., Doren., & Van Kest., oozed long cirrhi of ellipsoidal spores measuring 4-6 X 2-3  $\mu\text{m}$ , from leaves collected at Elk Garden on Rt. 600 between Mt. Rogers and White Top Mt., Smyth Co., Aug. 31, 1989 (89-68). (NR,U).

*Sphaeropsis malorum* Berk., better known as the apple black rot fungus, is reported to cause a leaf spot on *P. pratense* in Virginia.

*Stagonospora nodorum* (Berk.) Castellani & Germano, a cause of node rot, was collected on the V.P.I. & S.U. farm, 1983 (83-Pp-2) and was sent to the Plant Clinic, V.P.I. & S.U., causing damage to the cultivar Mohawk, near Strasburg, Shenandoah Co., Apr. 29, 1991 (91-14, Clinic no. 91-34C). (NR,U).

**Deuteromycotina-other:**

*Rhizoctonia solani* Kühn, causing sharp eyespot, occurred in Snowville, Rt. 613 at the Little R., Montgomery Co., Aug. 5, 1989 (89-23). (NR-V).

*Phragmites communis* Trin., common reed

## Deuteromycotina-Hyphomycetes:

*Arthrinium phaeospermum* (Cda.) Ellis, causing black mold of culms and leaves, occurs throughout the host range; thus, it occurs in Virginia (Farr et al., 1989).

## Deuteromycotina-Coelomycetes:

*Phaeoseptoria urvilleana* (Speg.) Sprague, a saprophytic leaf mold, was collected at Pollards Landing near Adner, Gloucester Co., Sept. 1984 (90-3). (NR,U).

*Stagonospora subseriata* (Desmaz.) Sacc. was in the Gloucester Co. collection above (90-3). (NR,U).

*Poa* spp., bluegrass, speargrass

Roane (1991) lists 16 *Poa* spp. advent in Virginia; only six of these have documented host-fungus relationships. We do not routinely collect from lawns; therefore, some of the diseases of *P. pratensis* may be omitted.

- 1 *P. alsodes* Gray.
- 2 *P. annua* L., annual bluegrass.
- 3 *P. compressa* L., Canada bluegrass.
- 4 *P. cuspidata* Nutt., early bluegrass.
- 5 *P. pratensis* L., Kentucky bluegrass.
- 6 *P. trivialis* L., rough stalked bluegrass.

## Myxomycetes:

*Physarum* sp., and *Fuligo* sp. are common slime molds observed on 5 in turf. We have not attempted to identify or collect these fungi.

## Plasmodiophoromycetes:

*Polymyxa graminis* Ledingham occurred in roots of 2 on the Island Farm, near U.S. 360, Richmond Co., May 25, 1983 (83-Pa-2). (NR,U).

## Ascomycotina:

*Blumeria graminis* (DC.) E. O. Speer, formerly *Erysiphe graminis* DC., the cause of powdery mildew, occurs frequently on 5, especially in lawns throughout Virginia. Although it is common, and occurs in our lawn, we have not collected it.

*Gibberella zeae* (Schw.) Petch, a cause of culm rot, occurred on 6 at the W. end of Kentland Farm, V.P.I. & S.U., Whitethorne, Montgomery Co., June 27, 1995 (95-27). (NR,U).

*Monographella nivalis* (Schaffnit) E. Müller, causing snow mold, occurs occasionally on 5 in western and northern Virginia. One collection came from 5 in front of Wallace Hall Annex, V.P.I. & S.U., Montgomery Co., Jan. 24, 1994 (94-1). (NR,V).

*Mycosphaerella holci* Tehon occurred in glumes of 5 collected along the N.S. Rwy., Whitethorne, Montgomery Co., June 12, 1991 (91-41). It is described by Sprague (1950). (NR,U).

*Parasphaeosphaeria michotii* (West.) O. Eriksson, with brown, 2-septate ascospores measuring 15-17 X 5-6  $\mu\text{m}$  occurred on glumes of 5 from the Whitethorne collection above (91-41). The determination was facilitated by the key of Shoemaker and Babcock (1985). (NR,U).

*Phaeosphaeria herpotrichoides* (DeNot.) L. Holm occurred on dead leaves of **5** collected near the Radford sewage plant, Montgomery Co., June 3, 1991 (91-29). (NR,U).

*Phaeosphaeria nigricans* (Roberge ex Desmaz.) L. Holm occurred on dead foliage of **6** at the Kentland Farm site above, June 27, 1995 (95-27). Its identity was facilitated by the keys of Shoemaker & Babcock (1989). (NR,U).

*Phaeosphaeria nodorum* (Müller) Hedz. occurred in the Whitethorne collection above (91-41). Usually the anamorph, *Stagonospora nodorum* (Berk.) Castellani & Germano, is encountered. (NR,V).

#### Basidiomycotina-Uredinales:

*Puccinia brachypodii* Otth var. *poae-nemoralis* (Otth) Cummins & Greene, leaf rust, is listed by Farr et al. (1989) as occurring in the range of **3**, including Virginia. We have found it on **5** in our yard, Lucas Dr., Blacksburg, Montgomery Co., June 15, 1995 (95-18), (NR,U); and on **6** at the Kentland Farm site above, June 6, 1995 (95-14). (NR,EU). Farr et al. (1989) list it in range of host for **3**, including Virginia.

*Puccinia graminis* Pers.:Pers., stem rust, occurred on **5** near the swimming area parking, Claytor Lake S.P., Pulaski Co., Oct. 24, 1991 (91-91). Farr et al. (1989) list it on **3** and **5** in the eastern states.

*Puccinia recondita* Roberge ex Desmaz., leaf rust, was the dominant rust on **5** in the Claytor Lake S.P. collection above (91-91). Farr et al. (1989) list it on **5** as in eastern states. We have found it on **5** in our yard, Lucas Dr., Blacksburg, Montgomery Co., Oct. 20, 1995 (95-46); near Solitude, V.P.I. & S.U., June 16, 1989 (89-Pp-1); and along N. Main St. near U.S. 460, Blacksburg (90-17), in Montgomery Co. A collection on **1** came from Rt. 613 at the Little R., Snowville, Montgomery Co., June 11, 1990 (90-28), (NR,U); and on **3** along Rt. 613, N. end of Mt. Lake, Giles Co., June 24, 1990 (90-46). (NR,U).

#### Basidiomycotina-Ustilaginales:

*Ustilago striiformis* (West.) Niessl frequently occurs in stands of **5** in fields and pastures in western Virginia. We collected it from our lawn, 607 Lucas Dr., Blacksburg, May 21, 1982 (82-Pp-1) and annually thereafter. It also occurred on **5** in the lawn near Solitude, V.P.I. & S.U., April 11, 1995 (95-8); both sites are in Montgomery Co.

#### Basidiomycotina-other:

*Laetisaria fuciformis* (McAlp.) Burds., causing red thread, is common on **5** in lawns around Blacksburg each year. It is sent in to the Plant Clinic annually on **5** from various parts of Virginia but is not listed on *Poa* by Farr et al. (1989). (NR,V).

*Melanotus phillipsii* (Berk. & Broome) Singer, causing white patch appeared on necrotic leaves and culms of **5** in our yard, 607 Lucas Dr., Blacksburg, Montgomery Co., July 27, 1994 (94-22). Farr et al. (1989) do not list this taxon. The fungus is described and illustrated on *Festuca* in the "Compendium of Turfgrass Diseases" (Smiley et al., 1992). (NR,U).

*Thanatephorus cucumeris* (Frank) Donk, usually seen in its anamorphic form.

*Rhizoctonia solani* Kühn, causes summer blight, brown patch, and sharp eyespot of numerous grasses. It is common on **5** in Virginia and has been known for many years.



## Deuteromycotina-Hyphomycetes:

*Cercosporidium graminis* (Fuckel) Deighton, cause of leaf streak, is reported by Farr et al. (1989) to occur in the range of the host for 3 and 5.

*Curvularia* sp. is reported by Farr et al. (1989) to occur in Virginia.

*Drechslera dictyoides* (Drechsli.) Shoem., causing a leaf spot occurred on 1 at the boat ramp, Radford River Pk., Montgomery Co., June 11, 1990 (90-25). (NR,U).

*Drechslera gigantea* (Heald & Wolf) Ito, causing zonate leaf spot, is reported by Farr et al. (1989) to occur on 3 and 5 in Virginia.

*Drechslera poae* (Baudys) Shoem., the cause of purple leaf spot and melting out of 5, is common in bluegrass lawns in Virginia (Farr et al., 1989).

*Volutella melaloma* Berk. & Broome occurred on incubated, senescent leaves of 1, collected at the N. end of Mt. Lake on Rt. 613, Giles Co., June 24, 1990. It is a frequent saprophyte on *Cyperus* spp., according to Ellis & Ellis (1985), who illustrate and describe the fungus. (NR,U).

## Deuteromycotina-Coelomycetes:

*Ascochyta sorghi* Sacc. associated with leaf spots and dead leaf tips, was the most frequently encountered fungus on *Poa* spp. It is reported on 5 from North Carolina and West Virginia but not from Virginia. It was collected on 1 along Rt. 613, at Little R., Snowville, Montgomery Co., June 11, 1990 (90-28) and at the N. end of Mt. Lake, along Rt. 613, Giles Co., June 24, 1990 (90-47). (NR,U). It was collected at the same Mt. Lake location on 3 June 24, 1990 (90-46), and along Rt. 712, Ellett, Montgomery Co., June 6, 1990 (90-21), (NR,V); and on 2 near Solitude, V.P.I. & S.U., April 10, 1990 (90-5), and S. of The Grove (President's Home), V.P.I. & S.U., May 3, 1990 (90-15), (NR,U); on 4, at the Mt. Lake site above, May 26, 1991 (91-21), (NR,U); on 5 along Lucas Dr., Blacksburg, Montgomery Co., May 21, 1982 (82-Pp-1); in Roane's yard, same area, July 31, 1990 (91-41), and June 15, 1995 (95-18); at Solitude V.P.I. & S.U., June 16, 1989 (89-Pp-1) and along N. Main St. near U.S. 460 bypass, May 30, 1990 (90-17); at the boat ramp, Radford sewage disposal area, Montgomery Co., June 3, 1991 (91-29), (NR,V); and on 6 along ditch at W. end of the flat field, Kentland Farm, V.P.I. & S.U., Whitethorne, Montgomery Co., June 6 (95-14) and June 27, 1995 (95-27). (NR,U).

*Colletotrichum graminicola* (Ces.) G. W. Wils., causing anthracnose, was collected on 1 along Rt. 613, N. end of Mt. Lake, Giles Co., June 24, 1990 (90-47), (NR,U); on 5 along N.S. Rwy., 1/2 mi. W. of Whitethorne, Montgomery Co., June 12, 1991 (91-41); and along Lucas Dr., Blacksburg, Montgomery Co., Oct. 20, 1995 (95-46). (NR,V).

*Coniothyrium psamme* Oudem., on dead blades of 5, occurred at Roane's yard, Lucas Dr., Blacksburg, Montgomery Co., June 15, 1995 (95-18). (NR,U). A description is provided by Sprague (1950).

*Hendersonia culmicola* Sacc., occurred on dead leaves of 1 along Rt. 613, N. end of Mt. Lake, Giles Co., June 24, 1990 (90-47). Sprague (1950) provides for a wide latitude of spore morphology in this species. Our determination may be questionable.

*Phaeoseptoria* sp. A fungus fitting *Phaeoseptoria* in Sprague's (1950) key, collected on 4 at Mt. Lake, does not fit any of the species listed. Our fungus has brown, obclavate, 6-8 septate spores measuring 18-24 X 2.5  $\mu$ m produced in flattened pycnidia 350-380  $\mu$ m in diameter. Sprague gives spore dimensions as 20-90 X 4.5-6.0  $\mu$ m for

*P. urvilleana*, too broad for our fungus; and 70-90 X 2.5-4.4  $\mu\text{m}$  for *P. phalaridis*, too long; *P. poae*, which one would anticipate is our fungus, measures 50-77 X 2.1-2.4  $\mu\text{m}$ , too long.

*Septoria macropodia* Pass. var. *septulata* (Gonz. Frag.) Sprague was collected on 2 at Solitude April 10, 1990 (90-5), and S. of The Grove May 3, 1990 (90-15), both on the V.P.I. & S.U. campus, Montgomery Co. (NR,U). Farr et al. (1989) list the fungus on 5 in Virginia.

*Sphaerellopsis filum* (Biv.-Bern. ex Fr.) Sutton, a hyperparasite, was associated with *Puccinia brachypodii* var. *poae-nemoralis* on 5 collected in our yard, Lucas Dr., Blacksburg, Montgomery Co., June 15, 1995 (95-18). It has been reported on *Poa* only from West Virginia (Farr et al., 1989). (NR,V).

*Stagonospora nodorum* (Berk.) Castellani & Germano, causing glume blotch, occurred on spikelets of 5 at the boat ramp near the sewage plant, Radford, Montgomery Co., June 3, 1991 (91-29). (NR,V).

*Rhizoctonia solani* Kühn, cause of brown, patch; see *Thanatephorus cucumeris*.

#### *Schizachyrium scoparium* (Michx.) Nash, little bluestem

Little bluestem is found in most lists as *Andropogon scoparius* Michx. but in Farr et al. (1989) it was listed under *Schizachyrium*. It occurs throughout Virginia but we have not collected it. The following are listed by Farr et al.

#### Ascomycotina:

*Balansia epichloe* (Weese) Diehl, causing black choke.

*Balansia henningsiana* (A. Möller) Diehl, causing black choke.

*Phyllachora luteo-maculata* (Schw.) Orton, causing tar spot.

#### Basidiomycotina-Uredinales:

*Puccinia andropogonis* Schw. II, III, rust, is listed in the range of the host but not specifically in Virginia. The aecial host is *Aesculus*, horse chestnut.

*Puccinia ellisiana* Thuem., II, III, rust, is listed in the range of the host but not specifically in Virginia. The aecial hosts are *Viola* spp.

#### Basidiomycotina-Ustilaginales:

Listed by Farr et al. are:

*Sorosporium everhartii* Ellis & Galloway, kernel smut.

*Sphacelotheca occidentalis* (Seym.) Clinton, seed smut.

*Spacelotheca seymouriana* Clinton, head smut.

*Sporisorium andropognis* (Opiz) K. Vánky, head smut.

Note: Distinguishing features of the smut fungi listed above may be seen in Fischer's (1953) monograph. Farr et al. (1989) list no Deuteromycotinae on little bluestem in Virginia.

#### *Setaria* spp.

There is confusion among authors as to the proper name for yellow foxtail; it assigned to *S. lutescens* by Blomquist (1948), Hitchcock & Chase (1950), and Roane (1991), but to *S. glauca* in Fernald (1950), and to dual entries (*S. glauca* and *S. pumila*) in Farr et al. (1989). We will assign it to *S. lutescens*.

- 1 *Setaria faberi* Herrm., giant foxtail.
- 2 *S. geniculata* (Lams.) Beauv., knotroot bristlegrass.
- 3 *S. italica* (L.) Beauv., Italian millet.
- 4 *S. lutescens* (Weigel) Hubb., yellow foxtail (See synonyms above).
- 5 *S. viridis* (L.) Beauv., green foxtail.

#### Oomycetes:

*Sclerospora graminicola* (Sacc.) Schröt. is reported by Farr et al. (1989) to occur on 5 in eastern states but not specifically in Virginia.

#### Ascomycotina:

*Phaeosphaeria luctuosa* (Niessl) Otani & Mikawa was collected on 1 in Roane's yard, Lucas Dr., Blacksburg, Montgomery Co., Oct. 14, 1989 (89-58). The fungus fruited on dead, incubated leaves. (NR,U).

#### Basidiomycotina-Ustilaginales:

*Sporisorium neglectum* (Niessl) K. Vánky, causing head smut, is reported on 4 in the range of the host by Farr et al. (1989).

*Ustilago crameri* Körn. in Fuckel, also causing head smut, is reported on 3 in the range of the host by Farr et al. (1989).

#### Deuteromycotina-Hyphomycetes:

*Bipolaris setariae* (Sawada) Shoem., causing leaf spot, occurred on 1 along Rt. 639 at the N.S. Rwy. grade crossing, Roanoke Co., Aug. 27, 1994 (94-42). (NR,U). *Cercospora setariae* Atk., causing leaf spot, occurred on 2 along N. Main St. near the U.S. 460 by-pass, Blacksburg, Montgomery Co., Sept. 11, 1990 (90-69), (NR,V); and on 4 at the Kipps Farm, Montgomery Co., Sept. 16, 1982 (82-Sc-1); and at lakeside, the marina cove, Claytor Lake, S.P., Pulaski Co., Aug. 2, 1989. (NR,V).

*Curvularia lunata* (Wakker) Boed., fruited on incubated, spotted leaves of 1 collected along Va. 43, 5 mi. E. of Buchanan, Botetourt Co., Aug. 27, 1994 (94-40). (NR,U).

*Fusarium equiseti* (Cda.) Sacc. appeared on incubated leaves of 1 in association with *Pyricularia grisea* (see below) collected along Va. 130-U.S. 501, Amherst Co., Aug. 14, 1993. (NR,U). This is probably a secondary invader of *P. grisea* spots.

*Nigrospora oryzae* (Berk. & Broome) Petch, appeared on incubated, senescent leaves of 1 collected along Va. 43, 5 mi. E. of Buchanan, Botetourt Co., Aug. 27, 1994 (94-38). Spores measured 12-15  $\mu\text{m}$  in diameter, thus differentiating it from *N. sphaerica* noted below. (NR,U).

*Nigrospora sphaerica* (Sacc.) E. Mason, appeared on incubated dead leaves of 1 collected in Roane's yard, Lucas Dr., Blacksburg, Montgomery Co., Oct. 14, 1989 (89-58); and on live leaves collected along Rt. 639, at N.S. Rwy., Roanoke Co., Aug. 27, 1994 (94-42). Spores measured 16-18  $\mu\text{m}$  in diameter. (NR,U).

*Pyricularia grisea* (Cooke) Sacc., causing gray leaf spot, is reported on 3 and 4 in Virginia by Farr et al. (1989). We have collected it on 1 in our yard, Lucas Dr., Blacksburg, Montgomery Co., Oct. 14, 1989 (89-58); June 29, 1989, but identified in 1991, (91-30), and July 13, 1993 (93-11); along Va. 130-U.S. 501, Amherst Co., near Rockbridge Co. line, Aug. 14, 1993 (93-19), (NR,EU); on 3 along S. Main St., Blacksburg, Montgomery Co., Sept. 5, 1991 (91-87); and on Sabot Hill Farm, Gooch-

land Co., July 17, 1986 (86-Si-1); on 4 along Va. 8 at Blue Ridge Pkwy., Floyd Co., Sept. 1994, but identified in 1995 (95-11); and on 5 at Franklin Rd. and Avenham Av., Roanoke, Oct. 7, 1994 (94-67). (NR,V).

Note: At the Amherst site, *S. faberi* and *S. lutescens* were in a mixed stand and even though both species are susceptible to *P. grisea*, only *S. faberi* had lesions.

#### Deuteromycotina-Coelomycetes:

*Ascochyta sorghi* Sacc. was collected on 4 along Va. 8 at the Blue Ridge Pkwy., Floyd Co., Sept. 1994, but identified in 1995 (95-11), (NR,U); and on 5 along Rt. 700 at Sinking Ck., Giles Co., Nov. 14, 1981 (81-Sv-1). (NR,U).

*Colletotrichum graminicola* (Ces.) G. W. Wils., causing anthracnose, was collected on 1 along Va. 43, 5 mi. E. of Buchanan, Botetourt Co., Aug. 27, 1994 (94-40), (NR-U); and on 2 along N. Main St. near the U.S. 460 bypass, Blacksburg, Montgomery Co., Sept. 11, 1990 (90-69). (NR,U).

*Phoma sorghina* (Sacc.) Boer., Doren. & Van Kest., associated with leaf spots on 1, was collected on the Kipps Farm, Sept. 18, 1984 (84-Sf-1) and in Roane's yard, Lucas Dr., July 13, 1993 (93-11), both in Blacksburg, Montgomery Co.; along Va. 43, 5 mi. E. of Buchanan, Botetourt Co., Aug. 27, 1994 (94-38); and along Rt. 639 at N.S. Rwy., Roanoke Co., Aug. 27, 1994 (94-42). (NR,U). It occurred on 5 at the Kipps Farm, Blacksburg, Montgomery Co., June 22, 1982 (82-Sv-1).

*Stagonospora nodorum* (Berk.) Castellani & Germano occurred on nodes of 5 along Rt. 700 at Sinking Ck., Giles Co., Nov. 14, 1981 (81-Sv-1). (NR-U).

#### *Sorghastrum elliottii* (Mohr.) Nash, Elliott's woodgrass

Only one fungus is reported on *S. elliottii*.

#### Basidiomycotina-Ustilaginales:

*Sphacelotheca andropognis-hirtifolii* (Henn.) Clinton is listed in three states, including Virginia, by Farr et al. (1989). In Virginia, it was collected by A. B. Massey 2 mi. W. of Chatham, Pittsylvania Co., Sept. 5, 1941. This smut was described as *S. sorghastri* Zundel (Massey & Zundel, 1942). However, it had been previously described. The collection also extended the range of *S. elliottii* from Coastal Plains to Piedmont Counties. The smut was the only fungus about which Massey published.

#### *Sorghastrum nutans* (L.) Nash, Indian grass

#### Deuteromycotina-Coelomycetes:

*Colletotrichum caudatum* (Sacc.) Peck occurred on foliage collected along old U.S. 460, S. slope of Brush Mt., Montgomery Co., Sept. 1980 (80-Sn-1); and along Rt. 624 between Rts. 650 & 697, Roanoke Co., Oct. 1, 1994 (94-68). (NR,V).

*Stagonospora simplicior* Sacc. & Briard occurred in both collections above (80-Sn-1, 94-68). Pycnidia were associated with leaf spots and were on the adaxial surface. Spores measured 30-44 X 11-13  $\mu\text{m}$ , a little broader than given by Sprague (1950). (NR,EU).

*Sorghum halepense* (L.) Pers., Johnsongrass

## Deuteromycotina-Hyphomycetes:

*Bipolaris sorghicola* (Lefebvre & Sherwin) Alcorn, causing purple leaf spot or target spot, has been collected at the boat ramp near the sewage plant, Radford, Montgomery Co., June 4, 1991 (91-26), and June 21, 1991 (91-53); ½ mi. W. of Whitethorne along N.S. Rwy., Montgomery Co., June 12, 1991 (91-51B); and in Culpeper Co., (Plant Clinic no. 93-1333), Aug. 16, 1993 (93-22). (NR,V).

*Cercospora sorghi* Ellis & Everh., causing gray leaf spot, was collected along N.S. Rwy., ¾ mi. S. of Va. 114 bridge, Montgomery Co., Nov. 7, 1982 (82-Sh-2); and at Franklin Rd. and Avenham Av., Roanoke, Oct. 7, 1994 (94-65).

*Exserohilum turcicum* (Pass.) Leonard & Suggs, causing leaf blight, occurred at Whitethorne, Montgomery Co., June 12, 1991 (91-51a); Aug. 5, 1993 (93-17); and along Va. 43 just E. of U.S. 11 and Buchanan, Botetourt Co., Aug. 27, 1994 (94-41). Farr et al. (1989) list it in eastern states but not specifically in Virginia. (NR,V).

*Gloeocercospora sorghi* Bain & Edger. ex Deighton, causing zonate leaf spot, was collected at Wingina, Nelson Co., Aug. 1, 1984 (84-Sh-2); and at Whitethorne, Montgomery Co., Aug. 5, 1993 (93-17). (NR,V).

## Deuteromycotina-Coelomycetes:

*Ascochyta sorghina* Sacc., causing rough leaf spot, has been collected at Wingina, Nelson Co., July 7, 1982 (82-Sh-1) and July 18, 1984 (84-Sh-1); along Rt. 700 W. of Rt. 615, Orange Co., Sept. 6, 1983 (83-Sh-1); and on Kentland Farm, Whitethorne, Montgomery Co., Aug. 5, 1993 (93-17). It is previously recorded from Virginia (Farr et al., 1989).

*Colletotrichum graminicola* (Ces.) G. W. Wils., causing anthracnose, has been collected at Wingina, Nelson Co., July 7, 1982 (82-Sh-1); and at Eggleston, Giles Co., Sept. 14, 1986 (86-Sh-1). (NR,V).

*Phoma sorghina* (Sacc.) Boer., Doren., & Van Kest., causing a leaf spot, was collected ¾ mi. S. of the Va. 114 bridge along the N.S. Rwy., Nov. 7, 1982 (82-Sh-2). (NR,V).

*Sorghum sudanense* (Piper) Stapf., Sudan grass

## Deuteromycotina-Hyphomycetes:

*Exserohilum turcicum* (Pass.) Leonard & Suggs, causing leaf blight, is a common fungus on Sudan grass but is not listed by Farr et al. (1989). Although we have seen it many times, we have collected it only at the Kipps Farm, Montgomery Co., July 1965 (65-1). (NR,U).

*Gloeocercospora sorghi* (see under *S. halepense*) is reported in Virginia by Farr et al. (1989).

*Pyricularia grisea* (Cooke) Sacc., causing blast or gray leaf spot, was submitted as a Plant Clinic specimen, source unknown, Aug. 21, 1961 (61-1). (NR,EU).

*Ramulispora sorghi* (Ellis & Everh.) Olive & Lefebvre is reported in Virginia by Farr et al. (1989).

## Deuteromycotina-Coelomycetes:

*Colletotrichum graminicola* (Ces.) G. W. Wils. is reported in Virginia by Farr et al. (1989). We collected it at Orange Co., Aug. 1960 (60-1).

*Phoma sorghina* (Sacc.) Boer., Doren., & Van Kest. is reported in Virginia by Farr et al. (1989).

*Spartina alterniflora* Loisel., salt marsh cordgrass

## Ascomycotina:

*Buergenerula spartinae* Kohlmeyer & Gessner is listed as in Virginia by Farr et al. (1989). We are not familiar with this fungus but a related species on *Carex* is illustrated by Ellis & Ellis (1985) and by Dennis (1978).

*Phaeosphaeria typharum* (Desmaz.) L. Holm is also listed by Farr et al. (1989) as in Virginia.

*Phyllachora spartina* Orton was collected at Woods Cross Roads, Gloucester Co., Nov. 25, 1982 (82-Sa-1). (NR,V).

## Basidiomycotina-Uredinales:

*Puccinia sparganioides* Ellis & Berth. III, rust, was collected at the Gloucester Co., site above (82-Sa-1).

## Deuteromycotina-Hyphomycetes:

*Alternaria alternata* (Fr.:Fr.) Keissl., is reported on seeds by Farr et al. (1989).

*Epicoecum nigrum* Link likewise is reported on seeds by Farr et al.

Note: The two fungi above are ubiquitous molds which are so common on necrotic tissue, we have ignored them for the most part.

## Deuteromycotina-Coelomycetes:

*Phaeoseptoria urvilleana* (Speg.) Sprague was collected on panicle branches at the Gloucester Co. site. Farr et al. (1989) do not include this taxon. It is described by Sprague (1943). Our specimen had subepidermal, erumpent pycnidia characterized by black slits above them in the epidermis. Spores were usually curved, rounded at ends, widest in the middle, pale brown or yellow, 5-7 septate, measuring 50-65 X 4-5  $\mu\text{m}$ . (NR,U).

*Spartina pectinata* Link, slough cordgrass

## Basidiomycotina-Uredinales:

*Puccinia sparganioides* Ellis & Barth., III, rust, was collected on the Island Farm, Richmond Co., Apr. 7, 1982 (82-Sp-1). (NR,V).

Miscellaneous reports: Farr et al. (1989) list *Claviceps purpurea* (Fr.:Fr.) Tul., *Phoma* sp., and *Stagonospora* sp. on *Spartina* spp. in Virginia.

*Sphenopholis nitida* (Bieler) Scrib., wedgegrass

## Deuteromycotina-Coelomycetes:

*Ascochyta sorghi* Sacc. was fruiting on green and dead foliage collected at the superintendent's cove, Claytor Lake S.P., Pulaski Co., June 17, 1990 (90-39). (NR,U).

*Phoma sorghina* (Sacc.) Boer., Doren., & Van Kest. occurred in the collection above (90-39). (NR,U).

*Sphenopholis obtusata* (Michx.) Scrib., prairie wedgegrass

## Deuteromycotina-Coelomycetes:

*Ascochyta sorghi* Sacc. appeared to be killing leaves on plants along Stony Ck., Rt. 635, Giles Co., June 24, 1990 (90-48) and along the trail, office branch, Claytor Lake S.P., Pulaski Co., June 21, 1991 (91-55). (NR,EU).

*Colletotrichum graminicola* (Ces.) G. W. Wils., causing anthracnose, occurred in the Giles Co. collection above (90-48) and at the marina cove, Claytor Lake S.P., Pulaski Co., May 30, 1991 (91-22). (NR,EU).

*Phaeoseptoria calamagrostidis* Sprague also occurred on the marina cove collection (91-22) but to a very limited extent. More material is needed.

*Sporobolus poiretii* (Roem. & Schult.) Hitchc., smutgrass

## Deuteromycotina-Hyphomycetes:

*Bipolaris ravenelii* (Curtis) Shoem. causing false smut, occurs throughout the Coastal Plain. We have no collection, but we made a collection at Warsaw, Richmond Co., for class use. Farr et al. (1989) do not list it on *S. poiretii*. (NR,U).

*Curvularia lunata* (Wakker) Boed. occurred on sheaths and spikelets collected in the picnic parking area, Fairystone S.P., Pulaski Co., July 24, 1994 (94-18). (NR,U).

*Myrothecium gramineum* Lib. was collected at the entrance to the swimming area, Claytor Lake S.P., Pulaski Co., Nov. 4, 1990 (90-83). It is illustrated and described by Ellis (1971). (NR,U).

*Pyricularia grisea* (Cooke) Sacc., causing gray leaf and sheath spot, was collected at the mouth of Poropotank Ck., end of Rt. 601, King & Queen Co., Aug. 10, 1991 (91-74); and in the picnic area, Claytor Lake S.P., Pulaski Co., Sept. 8, 1991 (91-83). (NR,U).

## Deuteromycotina-Coelomycetes:

*Colletotrichum graminicola* (Ces.) G. W. Wils. occurred in the picnic area, Claytor Lake S.P., Pulaski Co., Aug. 2, 1989 (89-21). (NR,U).

## Deuteromycotina-other:

*Rhizoctonia solani* Kühn, causing summer blight and sharp eyespot, was collected in the Pulaski Co. site above (89-21); and at Adner, Gloucester Co., June 24, 1991 (91-45). (NR,U).

*Tridens flavus* (L.) Hitchc., purpletop, greasegrass

## Ascomycotina:

*Phaeosphaeria eustoma* (Fuckel) L. Holm was collected at the N. end of Claytor Lake S.P. near the shore, Pulaski Co., Oct. 1, 1995 (95-38). It was identified with the aid of a key by Ellis & Ellis (1985). (NR,U).

## Basidiomycotina-Uredinales:

*Puccinia windsoriae* Schw., II, III, rust was collected in Montgomery Co. on the Kipps Farm, Oct. 12, 1981 (81-Tf-1); on the old horticulture farm, now The Market Place, Christiansburg, Sept. 19, 1989 (89-47); and along N. Main St. near U.S. 460 bypass, Blacksburg, Nov. 27, 1990 (90-82). Collections were also made in Claytor Lake S.P., Pulaski Co., Nov. 21, 1987 (87-Tf-1) and Oct. 1, 1995 (95-38); and at I-81

Dixie Caverns interchange, Roanoke Co., Oct. 30, 1989 (89-63). Farr et al. (1989) report it as in eastern states but not specifically in Virginia. (NR,V).

#### Deuteromycotina-Hyphomycetes:

*Curvularia protuberata* Nelson & Hodges occurred along Va. 8, 1 mi. N. of Rt. 807, Floyd Co., Sept. 25, 1994 (94-62). (NR,U).

*Neottiosporina paspali* (Atk.) Sutton & Alcorn, also known as *Stagonospora paspali* Atk., is reported from Virginia by Farr et al. (1989). The spores have obscure gelatinous horns on the distal end which is the basis for separation into *Neottiosporina*. Spore measurements are given by Sprague (1950) as 24-28 X 7-9  $\mu$ m.

*Rhychosporina tridentis* Sprague & Rogerson, a cause of sheath and blade spot, is common in western Virginia each year. We have collected it along Va. 8, S. of Floyd near Dodds Ck., Floyd Co., Sept. 25, 1994 (94-62); between Forest and Bedford, along U.S. 220, Bedford Co., Sept. 4, 1994 (94-45); at Devils Backbone overlook, near M.P. 145, Blue Ridge Pkwy., Franklin Co., Aug. 30, 1992 (92-18); along N. Main St., Blacksburg, Montgomery Co., Sept. 11, 1990 (90-70); on the old horticulture farm, now The Market Place, Christiansburg, Montgomery Co., (89-47); and at Dickey Ridge, Skyline Drive, Warren Co., Sept. 5, 1990 (90-65). (NR,V).

*Stagonospora tridentis* Sprague & Rogerson, having been reported on living leaves only from Kansas (Farr et al., 1989), was collected along N. Main St., Blacksburg, Montgomery Co., Nov. 27, 1990 (90-82); and between I-81 and U.S. 11, Dixie Caverns, Roanoke Co., Oct. 30, 1989 (89-63). (NR,EU).

*Tripsacum dactyloides* (L.) L., eastern gamagrass

#### Ascomycotina:

*Claviceps tripsaci* Stevens & Hall, ergot, has been known from Virginia for many years (Farr et al., 1989). We collected along Va. 6, E. of Columbia in Goochland Co., Aug. 9, 1991 (91-75a); and 1/2 mi. E. of the Rivanna R. bridge, Fluvanna Co., Aug. 3, 1983 (83-Td-1).

#### Basidiomycotina-Uredinales:

*Puccinia polysora* Underw., rust, is reported to be on *Tripsacum* in Virginia (Farr et al., 1989). We have not seen it.

*Puccinia tripsaci* Dietel & Holw., rust, was collected along Rt. 604 near Rt. 714, Midvale, Rockbridge Co., July 18, 1993 (93-14). We have a specimen in the class files collected along U.S. 250 at Meechums R. near Crozet, Albemarle Co., Aug. 28, 1957 (57-Td-1). Although known from Maryland and North Carolina, it has not been reported from Virginia (Farr et al., 1989). (NR,V).

#### Deuteromycotina-Hyphomycetes:

*Curvularia protuberata* Nelson & Hodges, associated with leaf spots, was collected along U.S. 17, Adner, Gloucester Co., June 24, 1991 (91-50). (NR,U).

*Fusarium avenaceum* (Fr.:Fr.) Sacc. occurred on incubated leaves collected along Rt. 603 near the railroad between I-81 and Lafayette, Montgomery Co., Oct. 2, 1994 (94-63). Previously, *T. dactyloides* had not been recorded in Montgomery Co. (NR,U).



*Nigrospora sphaerica* (Sacc.) E. Mason fruited on incubated leaves collected at the Montgomery Co. site, Sept. 13, 1992 (92-25). (NR,U).

Deuteromycotina-Coelomycetes:

*Colletotrichum graminicola* (Ces.) G. W. Wils. was collected at the Montgomery Co. site Sept. 1, 1991 (91-80), Sept. 13, 1992 (92-25), and Oct. 2, 1994 (94-63); and at Wingina, Nelson Co., Sept. 1982 (82-Td-1).

*Stagonospora arenaria* Sacc. was collected at the Montgomery Co. site Sept. 1, 1991 (91-80); and Sept. 13, 1992 (92-25). (NR,U).

*Uniola laxa* (L.) B.S.P.

Basidiomycotina-Ustilaginales:

*Ustilago uniolae* Ellis & Everh., seed smut, is listed in Virginia by Farr et al. (1989).

Deuteromycotina-Hyphomycetes:

*Nigrospora sphaerica* (Sacc.) E. Mason occurred on incubated leaves collected along U.S. 58 near Rt. 867, Patrick Springs, Patrick Co., Sept. 25, 1994 (94-56). (NR,U).

*Rhynchosporina tridentis* Sprague & Rogerson was associated with leaf lesions collected at the Patrick Co. site (91-56). For a description of the fungus, see Sprague & Rogerson (1958). (NR,U).

Deuteromycotina-Coelomycetes:

*Colletotrichum graminicola* (Ces.) G. W. Wils., causing anthracnose, occurred at the Patrick Co. site (94-56) and along the New R. in Giles Co. near Montgomery Co., Oct. 11, 1989 (89-57). (NR,U).

*Hendersonia culmicola* Sacc. var. *minor* Sacc. occurred in the Patrick Co. collection. For a description of the fungus, see Sprague (1950). (NR,U).

*Uniola paniculata* L., sea oats

Basidiomycotina-Ustilaginales:

*Ustilago uniolae* Ellis & Everh., seed smut, is the only fungus on *U. paniculata* listed for the eastern states; presumably, Virginia is included (Farr et al., 1989).

*Zizania aquatica*, annual wild rice

Ascomycotina:

*Gaeumannomyces graminis* (Sacc.) Arx & Oliver, causing culm rot, is listed as in Virginia by Farr et al. (1984).

Basidiomycotina-Ustilaginales:

*Entyloma lineatum* (Cooke) Davis, leaf smut, is listed in the range of the host by Farr et al. (1989), thus, including Virginia.

DISCUSSION

In the foregoing list we have relied upon the publication of Farr et al. (1989) to determine whether a new record (NR) is warranted. Except for a few species used as forage or turf, there are few recent records of graminicolous fungi. Therefore, almost any effort in collecting and identifying will lead to discovery of new associations and

occurrence of new species in the region. In our case, most collections have been made on vacation, picnic, and fishing trips; only a few trips were taken as collecting forays. Even so, the number of new associations is surprisingly large. In this list, we have recorded over 160 new associations for the United States (NR-U), 24 for eastern United States (NR-EU), and 46 for Virginia (NR-V). Many of the fungi in our collection are known as important plant pathogens. Some occur in rather obscure associations. It is probable that they represent innocuous strains but they could also represent reservoirs of pathogens awaiting the appropriate host and environment to explode into detrimental economic forces. They also represent a resource available for exploitation as biological control agents for weeds and fungus diseases.

It will be seen that our collections are concentrated in Montgomery and surrounding counties. We have few samples from the Piedmont and almost none from the Coastal Plain. Thus, it should seem obvious that numerous species and new associations await discovery. Intensive surveys in single counties, cities, ecosystems, or neighborhoods should be productive. We encourage those with mycological interests to survey the graminicolous fungi of Virginia. The results should be rewarding.

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