Graminicolaous Fungi of Virginia: Fungi Associated with Genera *Aegilops* to *Digitaria*

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ABSTRACT

Fungus-grass associations for grass species in the genera *Aegilops* through *Digitaria* occurring in Virginia are listed here below. Included are associations we have found and those from other published lists. New associations for Virginia are designated as new records (NR, V), for the United States (NR, U) and for eastern U.S. (NR, EU); the last named implies east of the Mississippi River. We made no attempt to determine whether or not a fungus is parasitic although many fungi are clearly the cause of lesions. Rust and powdery mildew fungi are obligate parasites; smut fungi are obviously parasitic. In our observations, the mere presence of a fungus is sufficient for us to regard it as a member of our mycoflora.

INTRODUCTION

Many fungi are known to occur on grasses in Virginia. We recently published an annotated list of those associated with cereals (Roane & Roane, 1994). Incidental to our travels around Virginia we have been collecting and identifying graminicolaous fungi for many years. Since our retirement in 1986, we have engaged in a more concerted effort to find such fungi. Even so, the ensuing reports show a concentration of effort in Montgomery and the surrounding counties. The Coastal Plain and Piedmont species are poorly represented; there is little we can do to rectify the hap-hazardness of our collections. However, numerous host-fungus associations we have encountered are previously unreported for Virginia and several are unreported for the United States. Therefore, we deem it important to record our observations and to integrate them with those previously reported. This assemblage of reports will add to the literature on the natural history of Virginia.

The grasses of Virginia were recently listed by Roane (1991) and distribution maps for most species have been published by Harvill et al. (1986). In order to simplify the accessibility of our notations, the host species will be listed alphabetically; for each host the fungus species will be listed under its major fungus class. Thus, the procedures to be followed are generally those of Farr et al. (1989), and Roane & Roane (1994). New records will be designated by NR followed by V, EU, or U, symbolizing Virginia, Eastern United States (generally east of the Mississippi River), or United States, respectively, based upon the records and distributions given by Farr et al. (1989). Our collections are designated by year and accession number (ex., 90-32). There was no

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effort to determine by inoculation whether fungi were pathogenic or saprophytic and no fungi were isolated or cultured. Thus, all determinations were made from structures in situ. Specimens were often incubated in moist chambers to stimulate sporulation.

Prior to 1940, the federal plant research station was Arlington Farm, site of the Pentagon Building. Several plant pathologists working there lived in northern Virginia. Since some were forage crop and turfgrass specialists, they collected and identified fungi on both native and introduced species. This will account for some of the records on seemingly exotic species which were cultivated and evaluated for various purposes. Most of the records are unavailable concerning the locality and date of collection. They are listed as occurring in Virginia by Farr et al. (1968) who cite Agricultural Handbook No. 165 (1960) as the original source of information. Those fungi listed by Farr et al. as being in Virginia and which we have not collected will be listed generally without comment at the end of each host genus and will be designated by the symbols My, M, O, A, B, Dh, and Dc for Myxomycetes, Mastigomycotina, Oomycetes, Ascomycotina, Basidiomycotina, Deuteromycotina-Hyphomycetes, and Deuteromycotina-Coelomycetes. We will also designate State Parks by S.P.

We have issued some preliminary reports on this work (Roane & Roane, 1984, 1985, 1991).

*Aegilops cylindrica* L., goatgrass

Only one colony of *A. cylindrica* is known to us; it lies strung out for one-half mile along the railroad west of Whitethorne in Montgomery Co. All fungi were identified from collections made there; all records are new for Virginia, most are new for the United States.

Ascomycotina:

*Mycosphaerella* sp. - A species of *Mycosphaerella* was common on senescent leaves (Coll. 95-26C). Ascospores were fusiform, biseriate in the ascus and measuring 12-15 X 3.5-4.0 m. The fungus appears to fit *M. recutita* (Fr.) Johanson (Dennis, 1978; Ellis & Ellis, 1985). If properly identified, we have found it on other grasses. We hesitatingly report it as new. (NR, U).

*Phaeosphaeria tritici* (Garov.) Hedjaroude was mixed with the *Mycosphaerella* collection above (95-26C), but only two ascomata were found. The fungus was assigned to *P. tritici* based on the description by Shoemaker and Babcock (1989). (NR, U).

Basidiomycotina - Uredinales:

*Puccinia recondita* Roberge ex Desmaz., leaf rust. A few uredineal pustules occurred on leaves collected June 14, 1990 (90-32). A nearby wheat nursery may have furnished inoculum. (NR, U).

Deuteromycotina - Hyphomycetes:

*Bipolaris sorokiniana* (Sacc.) Shoemaker. One incubated leaf (Coll. 95-26C, June 27, 1995) produced dark brown, 6-9-septate conidia measuring 60-72 X 18-23 μm, typical of this species. Since we found the fungus in a relatively small sample, it is probably common on *A. cylindrica*. (NR, U).

*Fusarium avenaceum* (Fr.:Fr.) Sacc. An incubated spike, (Coll. 96-26D, June 27, 1995) produced masses of salmon or peach colored, 3-5-septate macroconidia meas-
uring 48-62 X 3-4 μm. As noted above, our sample was very small; therefore, this fungus is probably a common colonizer of *A. cylindrica* spikes. (NR, U).

*Fusarium sporotrichioides* Sherb., head blight. A collection of June 12, 1991 (91-35B) was found to have spikes colonized by a *Fusarium* sp. with macroconidia measuring 27-45 X 3-5 μm and having 1-5 septa but mostly 3 septa. The spores were broader and shorter than those of *F. avenaceum*. *Fusarium acuminatum* was observed on *A. cylindrica* by Sprague (1950) causing root rot; no head blights have been reported. (NR, U).

**Deuteromycotina - Coelomycetes:**

*Ascochyta graminea* R. Sprague & Johnson, on senescent leaves. Only one collection, June 14, 1990, has been found (90-32). Pycnidiospores measured 12-19 X 4-6 μm much broader than in the following species. (NR, U).

*Ascochyta sorghi* Sacc. was associated with leaf spots and was prevalent on senescent leaves. We have found this fungus on all specimens of the host. Pycnidiospores measured 12-18 X 2-3 μm Collections have been made in three different years (90-32, 91-35A,-B, 95-13) all in June. (NR, EU).

*Colletotrichum graminicola* (Ces.) G. W. Wilson, anthracnose, occurred on leaves and culms of every collection we made. The fungus produced lesions and colonized senescent structures. It occurs in the several collections we made (90-32, 91-35A,-B, 95-13, 95-26A), and on V.P.I. & S.U. Herbarium specimens from Campbell Co. (VPI & SU Herb. No. 13458), Clark Co. (No. 13459), Rockingham Co. (No. 18466), and Russell Co. (No. 13455).

*Stagonospora nodorum* (Berk.) Castellani & Germano, node rot. This fungus is well known as *Septoria nodorum* (Berk.) Berk. causing glume blotch of wheat. Collections exist from June 12, 1991 and June 27, 1995 (91-35A, 95-26B). (NR, U).

**Agropyron repens** (L.) Beauv., syn., *Elytrigia repens* (L.) Nevski, quackgrass

**Ascomycotina:**

*Claviceps purpurea* (Fr.:Fr.) Tul., ergot. This fungus is widespread on *A. repens* and is easily recognized by the prominent purplish pseudosclerotia protruding from spikelets as the host nears maturity. Specimen 82-Ar-7 of our collection is the anamorphic stage *Sphaecilia segetum* Lev., which precedes the sclerotal stage. Farr et al. (1989) describe *C. purpurea* as occurring in the range of the host.

*Erysiphe graminis* DC., syn., *Blumeria graminis* (DC.) E.O. Speer, powdery mildew, occurs throughout the range of the host (Farr et al., 1989), thus is widespread on *A. repens* in Virginia. Collections 83-Ar-7, and 91-15 are from Blacksburg, Montgomery Co., June 14, 1983, and May 2, 1991, respectively.

*Mycosphaerella recutita* (Fr.) Johnson, associated with leaf spots, was collected June 27, 1995 on Kentland Farm (VPI & SU), Whitethorne, Montgomery Co. Ascomata had no paraphyses; ascospores were biseriate, hyaline, 1-septate, cylindrical, measuring 12-13 X 4 μm. Identification was based on the description by Ellis & Ellis (1985). (NR, U).

*Phomatospora dinemasporium* Webster is described as being widespread on dead grass stems (Ellis & Ellis, 1985, p. 465). It is most frequently found in the anamorphic stage, *Dinemasporium strigosum* (Pers.:Fr.) Sacc. It was found on *A. repens* in

*Phyllachora graminis* (Pers.:Fr.) Nitschke, tar spot, occurs frequently on *A. repens* in Montgomery Co. We have two collections (82-Ar-10, 84-Ar-7) made in July and October, 1982 and 1984, respectively. (NR, V).

**Basidiomycotina - Uredinales:**

*Puccinia coronata* Corda, crown rust, may be found on *A. repens* in Montgomery Co. throughout the host's growing season. Apparently it survives in the uredinal stage as the alternate hosts, *Rhamnus* spp., are uncommon in this area. We have two collections from Montgomery Co., 91-15, 91-42, made May 2, and June 12, 1991, respectively. (NR, V).

*P. graminis* Pers., black stem rust, occurs sporadically on grasses in the mountains of western Virginia. We have encountered it on *A. repens* only once (83-Ar-1) in Montgomery Co. near the junction of Rts. 657 and 685 in November, 1983. (NR, V).

*P. recondita* Roberge ex Desmaz., leaf rust, is common on *A. repens* in the Montgomery Co. region of Virginia yet Farr et al. (1989) report its occurrence only from West Virginia and South Dakota. We have collections made in June from Whitethorne, Montgomery Co. (90-34, 95-25) and Claytor Lake S.P., Pulaski Co. (89-11). (NR, V).

**Basidiomycotina - Ustilaginales:**

*Urocystis agropyri* (Preuss.) Schroet., flag smut, occurs in the northeastern states as far south as Pennsylvania, according to Farr et al. (1989). Specimens were collected in June 1982 and July 1983 from the same colony of *A. repens* in Montgomery Co. in successive years (82-Ar-6, 83-Ar-6), thus extending its range into southwestern Virginia. (NR, V).

**Deuteromycotina - Coelomycetes:**

*Ascochyta graminea* (Sacc.) R. Sprague & A. G. Johnson was found on specimens from a single colony of *A. repens* in Blacksburg. Spores were 13-16 X 3.5-5.0 μm, generally shorter and broader than in *A. sorghii*; it was collected May 2, 1991 in Montgomery Co. (91-15). NR, U.

*A. sorghii* Sacc. was found in Blacksburg and near Whitethorne, Montgomery Co. May 2, and June 12, 1991. Spores measured 12-20 X 2-4 μm. Farr et al. (1989) list it only as in Massachussetts in Eastern U.S. (NR, V).

Additional species reported as occurring in Virginia (Farr et al., 1989): *Drechslera gigantea* (Heald & Wolf) Ito, *D. tritici-repens* (Died.) Shoem.

*Agrostis* spp., bentgrass, hairgrass, redtop

Eleven species of *Agrostis* L. are listed by Roane (1991) as occurring in Virginia. Some are turf grasses and some are Coastal Plains species. We have identified fungi on five species. Farr et al. (1989) list several fungi from Virginia that we have not encountered. These will be appended to the end of our list. Here the host species are numbered; in the text, the numbers will refer to these hosts:

1. *Agrostis alba* L. (including *A. stolonifera* L.), redtop.
2. *A. gigantea* Roth. - *Agrostis alba*, *A. gigantea*, *A. palustris*, and *A. stolonifera* are taxonomically related and the latter three may be subspe-
cies of *A. alba*. A specimen identified as *A. gigantea* by T. F. Wieboldt, V.P.I. & S.U. Herbarium, was found to harbor several interesting fungi. A single collection was made along Stroubles Ck. on the university farm between the beef and swine barns, Blacksburg, Montgomery Co., Sept. 2, 1994.

4. *A. perennans* (Walt.) Tuck, autumn bentgrass.

Ascomycotina:

*Epichloë typhina* (Pers.:Fr.) Tul., causing choke disease, was found in a large colony of 4 growing in an abandoned logging road on the south slope of Gap Mt. about 5 mi. west of highway U.S. 460, northwestern Montgomery County, July 1983 and 1984 (83-Ap-1, 83-4, 84-Ap-7b). A strong mushroom-like odor was associated with developing stromata. The colony was observed throughout the summer for two years. A brief report has been published (Roane & Roane, 1984).


*Phaeosphaeria nigrans* (Roberge ex Desmaz.) L. Holm occurred on foliage of a collection of 4 from under trees south of the swimming pavillion at Claytor Lake S.P., Pulaski Co., Aug. 2, 1989 (89-27). Ascospores were 5-septate, 20-22 X 4-5 µm, the second cell enlarged. This is a plurivorous fungus and, thus, could occur on many grass hosts (Shoemaker & Babcock, 1989). (NR, U).

Basidiomycotina:


*Puccinia graminis* Pers., stages II and III, black stem rust, was collected on *I* at the Stroubles Ck. site above (NR, V), and on 2 at the same location (94-53). (NR, EU).

*Puccinia recondita* Roberge ex. Desmaz., II, III, was collected on 5 along Big Reed Island Ck. above the confluence with Greasy Ck. in Carroll Co., Apr. 19, 1992 (92-14). (NR, V).

*Thanatephorus cucumeris* (A. B. Frank) Donk is listed by Farr et al. (1989) as a cause of brown patch of *I* in Virginia. The fungus is better known by its anamorphic name, *Rhizoctonia solani* Kuehn. It is frequently found on specimens sent to the V.P.I. & S.U. Plant Clinic.

Deuteromycotina - Hyphomycetes:


Drechslera dematioides (Bubák & Wröbl) Subram. & Jain, causing leaf spot and wilted leaves was collected in our yard in Blacksburg, Montgomery Co. on 1 July 16, 1990 (90-55). Conidia measured 24-45 X 14-17 μm and had 3-4-septa. (NR, V).

Drechslera erythrospila (Drechsl.) Shoem. causing a red leaf spot was collected on 1 along the lake shore, Claytor Lake S.P., Pulaski Co., July 14, 1989 (89-2). Conidia measured 35 X 100 μm and were 2-10-septate. It is common on 1 in Virginia. A collection on 4 came from the hiking trail at the Mt. Rogers Recreation Area Headquarters, Rt. Va. 16, Smyth Co., Aug. 14, 1994 (94-29). Although it is widespread on other Agrostis spp., it is not reported on 4. (NR, U).

Mastigosporium rubricosum (Dearn. & Barth.) Nanfr. (Sprague, 1950; pp. 402-405) was found on 3 along War Branch Trail off Rt. 613, Giles Co., June 24, 1990 (90-42). It appears to be a primary pathogen. (NR, U).


Deuteromycotina - Coelomycetes:

Ascochyta sorghii Sacc. causing wilted leaves was collected on 1 in our yard, Blacksburg, Montgomery Co., July 16, 1990 (90-55). (NR, V).

Colletotrichum caudatum (Sacc.) Peck fruited on a few leaves of 2 collected along Stroubles Ck., V.P.I. & S.U. farm, Montgomery Co., Sept. 2, 1994 (94-53). This fungus is also known as Ellisiella caudata (Peck) Sacc. Spores feature a tapering appendage (NR, U).

Colletotrichum graminicola (Ces.) G. W. Wils., the anthracnose fungus, is for grasses an omniphyle. If we search long enough, we may find it colonizing all grasses in our region. We have found it on four of the five Agrostis spp. examined. On 1 it was common on leaves and culms collected along Stroubles Ck., V.P.I. & S.U. farm, Montgomery Co., Sept. 2, 1994 (94-50), and along the lake shore, Claytor Lake S.P., Pulaski Co., July 14, 1989 (89-2). (NR, V). We collected it on 2 along Stroubles Ck., Sept. 2, 1994 (94-53). (NR, U). It occurred on plants of 4 under trees at Claytor Lake S.P., Aug. 2, 1989 (89-27). (NR, U). We found it on 5 collected along Big Reed Island Ck. above the confluence with Greasy Ck., Carroll Co., April 19, 1992 (92-14). (NR, U). Ubiquitous as it is, this fungus has not been reported previously by Farr et al. (1989) on any Agrostis sp. in Virginia.

Phyllosticta anthoxella R. Sprague was collected on 4 at the Mt. Rogers Recreation Area Headquarters on Va. 16, Smyth Co., Aug. 14, 1994 (94-29). Pycnosporos were bacilliform, 5-7 X 1.0-1.5 μm. It was reported previously only from Oregon on Anthoxanthum (Farr et al. 1989). (NR, U).


Note: P. sorghina is assigned to Phoma sorghina (Sacc.) Boerema, Doren., & Van Kest. by Farr et al. (1989). The distinction between the genera appears to be arbitrary.
Septoria spp. are sometimes very difficult to separate. Although we have assigned our collections to two species, variation in spore morphology may have led us to err. No Septoria spp. are listed on Agrostis spp. east of the Mississippi River by Farr et al. (1989).

Septoria passerinii Sacc. having 3-septate spores measuring 24-35 X 1.5-2.0 µm was collected on 4 on Gap Mt., Montgomery Co., July 14, 1984 (84-Ap-7). (NR, U). It was also found on 1 along the lake shore at Hungry Mother S.P., Smyth Co., Aug. 29, 1989 (89-41). Spores were 3-septate, occasionally 4-septate, measuring 20-30 X 1.5-2.0 µm mostly 25-28 X 1.8 µm. (NR, U).

Septoria secalis Prill. & Delacroix having 3-septate spores measuring 21-50 X 2-3 µm has been collected on 3 & 4. A collection with 1-4-septate, mostly 3-septate spores measuring 35-47 X 2.5-3.5 µm was found causing leaf spots on 3 at Hungry Mother S.P., Smyth Co., Sept. 3, 1989 (89-59-2). (NR, U). It was also found on 4 under trees at Claytor Lake S.P., Pulaski Co., Aug. 2, 1989 (89-27). Spores were 3-septate, measuring 21-35 X 2.0-2.5 µm. A collection causing leaf spots on 4 from the Mt. Rogers Recreation Area Headquarters, Va. 16, Smyth Co., Aug. 14, 1994 (94-29) had 3-septate spores measuring 35-50 X 2-3 µm. (NR, U).

Note: Septoria passerinii and S. secalis have different spore widths. Sprague (1950), whose key and descriptions we have used, lists S. secalis on rye but S. secalis var. stipae Sprague on Agrostis. The var. stipae has spores about 10 µm longer than S. secalis. Otherwise, they are similar.

Stagonospora foliicola (Bres.) Bubák occurred on newly wilted leaves of 3 collected at Hungry Mother S.P., Smyth Co., Sept. 3, 1989. Spores were typical of those illustrated by Sprague (1950, fig. 57A). (NR, U).

Sphaerellopsis filum (Biv.-Bern. ex Fr.) Sutton is not a parasite of grasses. We found it parasitizing Puccinia coronata on 4 collected on Gap Mt. at the rust collection site above, Montgomery Co., Aug. 16, 1983, Aug. 14, 1984 (83-Ap-1, 84-Ap-7) and parasitizing P. recondita on 5 along Big Reed Island Ck. in Carroll Co., Apr. 19, 1992 (92-14).

In addition to our collections, the following are reported by Farr et al. (1989) to occur on Agrostis spp. in Virginia. The letters preceding each fungus group are explained at the end of the introduction.

O - Pythium aphanidermatum (Edson) Fitzp. on A. alba and A. capillaris L.: A - Phyllachora graminis (Pers.:Fr.) Nitschke on A. alba; Sclerotinia homoeocarpa Bennett on A. alba, A. canina, and A. capillaris; B - Thanatephorus cucumeris (A. B. Frank) Donk on A. alba, A. canina, and A. capillaris; Dh - Curvularia lunata (Wakk.) Boedijn on A. alba; Drechslera gigantea (Heald & Wolf) Ito on A. alba, D. triseptata (Drechs.) Subr. & Jain on A. alba; Dc - Cheilariia agrostis Lib. on A. alba.

Andropogon gerardii Vitman, big bluestem

Ascomycotina:

Phyllachora americana D. G. Parbery, causing tar spot, occurred along Va. 8, 1 mi. N. of Rt. 807, in a field next to Dodds Creek, Floyd Co., Sept. 26, 1994 (94-57). Although cited by Farr et al. (1989) as occurring on Andropogon sp., it had only been collected on A. gerardii in Georgia and Florida. (NR, V).
Basidiomycotina:

*Puccinia andropogonis* Schwein., II, III, causing a rust, was collected at the site above (94-57). It is prevalent throughout the eastern states (A.H. 165, 1960).

Deuteromycotina - Hyphomycetes:

*Fusarium sambucinum* Fuckel was parasitic on *Phyllachora americana* collected at the Va. 8 site above (94-57). (NR, V).

*Nigrospora sphaerica* (Sacc.) Mason appeared in incubated leaves collected along Sinking Creek in Giles County near the Craig Co. line, Oct. 3, 1994 (94-69). Most likely it is a saprophyte. (NR, V).

*Tetraploa aristata* Berk. & Broome appeared on incubated leaves from the Va. 8 site (94-57). No doubt this is a saprophyte. (NR, V). *T. ellisi* is listed by Farr et al. (1989) as occurring on *Andropogon* sp. in Alabama.

Deuteromycotina - Coelomycetes:

*Colletotrichum graminicola* (Ces.) G. W. Wils. was collected near the Norfolk Southern Rwy., S. of Va. 114, Montgomery County, Nov. 7, 1982 (82-Ag-11), and along Sinking Creek in Giles County near the Craig Co. line, Oct. 3, 1994 (94-69). (NR, V).

*Phyllosticta andropogonivora* R. Sprague & Rogers was found on a V.P.I. & S.U. Plant Clinic specimen (CL no. 94-1219) sent in from James City County, Aug. 11, 1994 (94-36). We also collected it at the Va. 8 site above, Sept. 26, 1994 (94-57). These are the first collections from the eastern states. (NR, EU).

*Andropogon virginicus* L., broomsedge

Basidiomycotina:

*Uromyces andropogonis* Tracy, III, was collected at the marina cove in Claytor Lake S.P., Pulaski Co. on overwintered culms, Apr. 17, 1991 (91-10); stages II and III were found on fall culms, Nov. 2, 1987, in the same area (87-Av-1). This rust fungus-host association is common in the eastern states (Farr et al., 1989).

Deuteromycotina - Coelomycetes:


*Phoma sorghina* (Sacc.) Boerema., Doren., & Van Kest. occurred with *C. graminicola* in the June collection (89-7). Spores measured 4-5 X 1.5-2.0 µm. These spores are smaller than those of other species reported on *Andropogon*. (NR, U).

Deuteromycotina - other:

*Rhizoctonia solani* Kuehn, causing summer blight is common on broomsedge at Claytor Lake S.P. We have observed it many times and collected it in June 1989 (89-7). (NR, V).

Other fungi reported by Farr et al. (1989) to occur on *Andropogon* spp. in Virginia are:

- A - *Balansia henningsiana* (Moell.) W. W. Diehl on *A. scoparius* Michx. (see also Diehl, 1950), *Phyllachora luteo-maculata* (Schwein.) Otton on *A. virginicus*; B - *Puccinia ellisianna* Thuem. on *A. virginicus*, *Sorosporium ellisi* G. Winter on *A.
gerardi, S. everhartii Ellis & B. T. Galloway on A. spp. (unspecified), Sphacelotheca monilifera (Ellis & Everh.) Clinton on A. glomerata Vitm., S. seymouriana Clinton on A. gerardii.

*Anthoxanthum odoratum* L., sweet vernalgrass

**Ascomycotina:**

*Phaeosphaeria eustoma* (Fuckel) L. Holm was collected at the marina cove, Claytor Lake S.P., Pulaski Co., May 30, 1991 (91-23). (NR, U). No ascomycete has been reported on this grass (Farr et al., 1989). (NR, U).

**Basidiomycotina:**

*Puccinia graminis* Pers., II, was collected on the VPI & SU Horticulture Farm (now the Market Place Shopping Center), Montgomery Co., June 28, 1989 (89-Ao-2) and on Kentland Farm, VPI & SU, Montgomery Co., June 13, 1990 (90-33). Both specimens were identified by J. F. Hennen, Purdue Univ., former curator of rust collections. A collection was made at the picnic area parking lot, Fairy Stone S.P., Patrick Co., May 23, 1993 (93-5). Although known from several eastern states, it has not been reported from Virginia (Farr et al., 1989). (NR, V).

*Puccinia recondita* Roberge ex. Desmaz. came from Claytor Lake S.P., Pulaski Co., May 30, 1991 (91-23). This is a new host for this fungus according to Farr et al. (1989) but Cummins (1971) lists *Anthoxanthum* sp. as a host. (NR, U).

**Deuteromycotina - Hyphomycetes:**

*Cercosporidium graminis* (Fuckel) Deighton was collected at Kentland Farm, Whitethorne, Montgomery Co., June 13, 1990 (90-33). This fungus has a wide host range but has not been recorded on this host before (Farr et al., 1989). (NR, U).

*Drechslera dematioides* (Bubá & Wróbl.) Subram. & P. C. Jain, causing leaf spot, was collected at several locations: VPI & SU Horticulture Farm (now the Market Place Shopping Center), Montgomery Co., June 22, 1989 (89-Ao-1); Claytor Lake S.P. in the picnic area Aug. 11, 1989 (89-32), and June 17, 1990 (90-37); at the marina cove, May 30, 1991 (91-23), Pulaski Co.; Adner, Gloucester Co., June 24, 1991 (91-44); Rt. 619, Indian Valley, Floyd Co., July 4, 1991 (91-60); Blue Ridge Pkwy., near Goundhog Mt., Carroll Co., June 18, 1995 (95-21). Although it is a common leaf spotter on *Anthoxanthum* and is reported in several eastern states, this fungus has not been reported from Virginia (Farr et al., 1989). (NR, V).

*Volutella ciliata* (Alb. & Schwein.) Fr. fruiting on incubated leaves collected in the picnic parking area, Fairy Stone S.P., Patrick Co., May 25, 1993 (93-5). This is probably a strict saprophyte. It is not listed by Farr et al. (1989); Ellis & Ellis (1985) describe it as, "Very common on dead herbaceous plants, Oct.-Apr., and best seen in the field after a shower of rain." It has a fringe of long white setae at the base of the sporodochium. (NR, U).

Note: In contrast, *Amerosporium atrum* (Fuckel) Hohn., is similar in appearance but has dark setae at the base. We have encountered both fungi on several grass collections.
Deuteromycotina - Coelomycetes:

*Ascochyta sorgii* Sacc., associated with purple-brown leaf spots and dead leaf tips, was collected at the picnic parking area, Fairy Stone S.P., Patrick Co., May 23, 1993 (93-5) and along the Blue Ridge Pkwy., near Groundhog Mt., Carroll Co., June 18, 1995 (95-21). It was reported previously only from West Virginia (Farr et al., 1989). (NR, V).

*Colletotrichum graminicola* (Ces.) G. W. Wils., causing anthracnose, was collected twice at Claytor Lake S.P., Pulaski Co., once in the picnic area Aug. 11, 1989 (89-32) and once at the marina cove, May 30, 1991 (91-23). It was also collected in the picnic area parking lot at Fairy Stone S.P., Patrick Co., May 23, 1993 (93-5). The only eastern states report for this fungus-host association is from Kentucky (Farr et al., 1989). (NR, V).

*Phyllosticta anthoxella* R. Sprague was collected on leaves at the VPI & SU Horticulture Farm (now The Market Place), June 23, 1989 (89-Ao-2). Spores were slightly colored pale olive, 8-10 X 1.0-1.5 μm. This fungus is reported from Oregon only (Farr et al., 1989). (NR, EU).

*P. minutispora* R. Sprague was present on the same collection (89-Ao-2). Spores measured 3.5-5.0 X 1.0-1.5 μm or about one-half the length of those of *P. anthoxella*. This fungus is not reported on *Anthoxanthum* (Farr et al., 1989). (NR, U).

*Stagonospora arenaria* Sacc. associated with purple-brown leaf spots, was collected in the picnic area, Claytor Lake S.P., Pulaski Co., June 17, 1990 (90-37); at Adner, Gloucester Co., June 24, 1991 (91-44); and at the picnic area parking lot, Fairy Stone S.P., July 24, 1994 (94-19). (NR, U). See note below.

*S. maculata* (Sacc.) Sacc., associated with leaf spots was collected at the picnic area, Claytor Lake S.P., Pulaski Co., Aug. 11, 1989 (89-32). (NR, U). See note below.

*S. nodorum* (Berk.) Cast. & Germano, associated with brown leaf spots, was collected at the VPI & SU Experiment Station, Warsaw, Richmond Co., May 15, 1982 (82Ao1). (NR, U). See note below.

Note: Spore measurements for the above: *S. arenaria*, 27-42 X 3-4 μm, not constricted at the septa; *S. maculata*, 26-32 X 3.5-4.0 μm, constricted at the septa; *S. nodorum*, 28-32 x 3-4 μm, usually broadest at the base. This fungus was prevalent on wheat nearby. None of the species has been reported on *Anthoxanthum* (Farr et al., 1989). Spore measurements and morphologies of the fungi conform to those given by Sprague (1950).

*Sphaerelopsis filum* (Biv.-Bern. ex Fr.) Sutton, was parasitic on *Puccinia recondita* in the Claytor Lake S.P. collection of May 30, 1991 listed above (91-23).

Farr et al. (1989) list no additional fungi on *A. odoratum* in our region.

*Aristida oligantha* Michx., prairie three-awn

Ascomycotina:

*Monographella nivalis* (Schaffnit) E. Müller & von Arx was collected on overwintered plants in a field off Country Club Dr., Blacksburg, Montgomery Co., Apr. 7, 1995 (95-3). (NR, U).
Deuteromycotina - Hyphomycetes:

*Curvularia inaequalis* (Shear) Boedijn appeared quickly on incubated leaves collected at edge of parking lot next to woods behind the marina-swimming area, Claytor Lake S.P., Pulaski Co., Oct. 30, 1995 (95-48). (NR, U).

*C. protuberata* Nelson & Hodges appeared on incubated, overwintered plants collected in the field behind Gables Shopping Center, Blacksburg, Montgomery Co., April 7, 1995 (95-3). (NR, U).


Species of *Alternaria*, *Cladosporium*, and *Stemphylium* also fruited on all *Aristida* collections.

Deuteromycotina - Coelomycetes:

*Colletotrichum graminicola* (Ces.) G. W. Wils., anthracnose, was collected at the Gables Shopping Center site and date as above (95-3). (NR, U).

*Ellisella caudata* Sacc. was collected at the Pembroke rock quarry, Giles Co., Apr. 2, 1995 (95-6). (NR, U).

In addition, Farr et al. (1989) list the following on *Aristida* spp. in Virginia:

A - *Balansia aristidae* (Atk.) Diehl on *Aristida* sp.; B - *Uromyces seditiosus* F. Kern on *A. purpurascens* Poir.

*Arrhenatherum elatius* (L.) J. Presl. & K. Presl., tall oatgrass

Ascomycotina:


*P. nodorum* (E. Müller) Hedj. occurred on leaves and culms at the old VPI & SU Horticulture Farm (now The Market Place), Montgomery Co., June 28, 1989 (89-Ae-1), and at 607 Lucas Dr., Blacksburg, Montgomery Co., June 23, 1989 (89-Ae-3). (NR, U).

Basidiomycotina:

*Puccinia coronata* Corda, II, III, crown rust, was collected at Rt. 700 and Sinking Ck., Giles Co., Nov. 14, 1981 (81-Ae-1); at 607 Lucas Dr., Blacksburg, Montgomery Co., July 8, 1983 (83-Ae-1); June 25, 1989 (89a), June 27, 1990 (90-52), June 21, 1995 (95-24); and at North Main St. near U.S. 460, July 1991 (91-x). It is reported by Farr et al. (1989) only in West Virginia of the eastern states. (NR, V).

Deuteromycotina - Hyphomycetes:

*Rhynchosporium orthosporum* Caldwell, causing scald, was collected at Pearisburg, Giles Co., near the Norfolk Southern Rwy., June 14, 1989 (89-Ae-1). (NR, U).

*Spermopora avenae* (R. Sprague & Johnson) R. Sprague, a cause of red leaf leaf, was collected at 607 Lucas Dr., Blacksburg, Montgomery Co., July 8, 1983 (83a), at the Pearisburg site above (89-Ae-1), and at the old VPI & SU Horticulture Farm, Montgomery Co., June 7, 1989 (89-Ae-2b). It is reported in the eastern states only from West Virginia (Farr et al., 1989). (NR, V).
S. subulata (R. Sprague) R. Sprague, causing blast, occurred in collection 89-Ae-21 above. Sprague (1950) illustrates S. subulata conidia as having a distal whip-like extension and Guba (1961) pictures S. avenae as having tapered extensions on each end. Both spore types were present but on different lesions (NR, U).

Deuteromycotina - Coelomycetes:

Ascochyta brachypodii (Sydow) R. Sprague & Johnson was collected at Rt. 700 and Sinking Ck., Giles Co., Nov. 14, 1981. Spores are broader than those of A. sorghi, the only other species recorded on A. elatius (Farr et al., 1989; Sprague, 1950). (NR, U).

Stagonospora avenae (Frank) Bissett was collected on the old VPI & SU Horticulture Farm, Montgomery Co., June 7, 1989 (89-Ae-2b) and at 607 Lucas Dr., Blacksburg, Montgomery Co., June 21, 1995 (95-24). It is known from West Virginia and Pennsylvania (Farr et al., 1989). (NR, V).

S. arenaria Sacc. was collected near M.P. 19, Blue Ridge Pkwy., on the Nelson-Augusta Co. line, June 25, 1991. (NR, U).

In addition, Farr et al. (1989) report B- Ustilago avenae (Pers.) Rostr., the cause of loose smut, as occurring in Virginia.

Arthraxon hispidus (Thunb.) Makino

No fungi have been reported previously on A. hispidus in Virginia (Farr et al., 1989).

Deuteromycotina - Hyphomycetes:

Bipolaris cynodontis (Marignoni) Shoem. was found on a specimen (VPI & SU Weed Ident. No. 93-288) sent from Albemarle Co., Aug. 12, 1993. (NR, U).

Periconia circinata (Mangin) Sacc. fruiting on incubated leaves collected July 9, 1989, 1 mi. S. of the Floyd-Franklin line on Rt. 860 (89-Ah-1a). (NR, U).

Ramulispora sorghi (Ellis & Everh.) Olive & Lefebvre was also collected at the Rt. 860 site (89-Ah-1b). (NR, U).

Deuteromycetes - Coelomycetes:

Phyllosticta minutaspora Sprague fruiting on dead leaf tips collected at the Rt. 860 site above (89-Ah-1b). (NR, U).

A Phyllosticta sp. having conidia measuring 9-10 X 3.5-4.0 μm fruiting on the Albemarle Co. collection above. It has characteristics of P. bromivora Sprague (spores measuring 6-11 X 3.0-3.8 μm) but fits neither Phyllosticta perfectly. We refrain from assigning our specimen.

Arundinaria gigantea (Walt.) Muhl., giant cane

We have collected giant cane from only one site, the Experiment Station property at Holland, Suffolk (formerly Nansemond Co.).

Basidiomycotina:

Puccinia arundinaria Schwein., rust, was collected April 16, 1982 (82-Ag-1). A sample was sent to the J. C. Arthur Herbarium, Purdue University where its identity was verified by J. F. Hennen. Farr et al. (1989) report it from southeastern states but not specifically from Virginia. (NR, V).
Deuteromycotina - Coelomycetes:

*Ascochyta sorghi* Sacc. was also collected April 16, 1982 (82-Ag-1). No *Ascochyta* spp. have been reported on giant cane (Farr et al., 1989). (NR, U).

Farr et al. (1989) report only one other fungus on leaves of giant cane from Virginia, *Sclerotium sacidioiides* Speg. This was the type specimen from which Spegazzini described the fungus. It is unknown elsewhere.

**Axonopus affinis** Chase, carpetgrass

We have not collected specimens of carpetgrass but Farr et al. (1989) list *Dh-Cerebella andropogonis* Ces., the cause of black heads, as occurring in Virginia. The fungus is illustrated and described by Ellis (1971).

**Brachyelytrum erectum** (Schreb.) Beav., long-awned woodgrass

Specimens of *B. erectum* have been collected from three sites; only one fungus was detected.

Deuteromycotina - Coelomycetes:

*Stagonospora brachyelytri* Greene was collected at Hungry Mother S.P., Smyth Co., Sept. 3, 1989 (89-42); in the woods behind the cabins at Claytor Lake S.P., Pulaski Co., June 21, 1991 (91-54); and at the Mt. Rogers Recreation Area Headquarters, Rt. 16, Smyth Co., Aug. 14, 1994 (94-27). The fungus is associated with elongated leaf spots (Sprague, 1950), and apparently is widespread in eastern states (Farr et al., 1989). (NR, V).

**Bromus** spp., brome grass, chess, cheat

In order to conserve space, the host species are listed and numbered. In the collection records, the hosts will be cited by number.

1. *B. ciliata* L. - fringed brome.
5. *B. latiglumis* (Shear) Hitchc.
8. *B. tectorum* L. - downy cheat

Ascomycotina:

*Claviceps purpurea* (Fr.:Fr.) Tul., ergot occurs in almost all stands of *Bromus.* We collected it only along Prices Fork Road opposite the entrance to Hethwood, Montgomery Co., Aug. 15, 1983 (83-Bi-1). Farr et al. (1989) report the fungus from the entire range of *Bromus.*

*Phaeosphaeria herpotrichoides* (De Not.) L. Holm, associated with leaf spots on *Bromus* was collected at the Craig Ck. Recreation Area, Jefferson National Forest, Oriskany, Botetourt Co., July 31, 1994. (NR, U).

*P. luctuosa* (Niessl) Otani & Mikawa, was collected on I near the mouth of Norris Run, N.W. Montgomery Co., July 1981 (81-Bc-1). Farr et al. (1989) report no *Bromus* spp. as hosts of this fungus. (NR, U).
P. nigrans (Roberge ex Desmaz.) L. Holm. has been collected on 4 near Grayson-
town, Pulaski Co., June 11, 1990, (90-27) (NR, U); on 6 Rt. 712, Ellett, Montgomery
Co., June 6, 1990, (90-22) (NR, U); on 7 at the Rt. 613 bridge over Little R., Snowville,

Phyllachora graminis (Pers.:Fr.) Nitschke, causing tar spot, was collected on I at

Basidiomycotina:

Puccinia recondita Roberge ex Desmaz., leaf rust, stage III, was collected on I near
the mouth of Norris Run, N.W. Montgomery Co., July 1981 (81-Bc-1), (NR, U); on 6
at Claytor Lake S.P., Pulaski, June 1989 (89-8); stages II, III, on 6 in same area, Sept.
1991 (92-6); on 6 on W. bank of New R., 1.5 mi above Pembroke, Giles Co., Aug. 13,
1994 (94-30). These are (NR, U) for 6.

Ustilago bullata Berk. in Hook., loose smut, was collected on 3 in a forage testing
nursery on the old Agronomy (Kipps) Farm, VPI & SU, Blacksburg, Montgomery Co.,
Oct. 17, 1957. Although Farr et al. (1989) give a long list for this fungus on Bromus
spp., there are no citations for Virginia. (NR, V).

Deuteromycotina - Hyphomycetes:

Bipolaris sorokiniana (Sacc.) Shoem., causing leaf spot on 8 was collected at
Lovers Leap Overlook, U.S. 58, Patrick Co., May 23, 1993 (93-7). It has been found
in Virginia on 3 but not on 8, according to Farr et al. (1989). (NR, V).

Drechslera bromi (Died.) Shoem., leaf spot of brome grasses, has been collected on 3
at the old Agronomy (Kipps) Farm, VPI & SU, Montgomery Co., May 31, 1956
and Aug. 15, 1960 (56-Bi-1), and July 10, 1985 (85-Bi-2) (NR, V); on 6 along Rt. 860,
near Endicott, Franklin Co., July 9, 1989 (89-46) (NR, U); on 7 near Graysontown,
Pulaski Co., July 11, 1990 (90-26), near the Rt. 613 bridge across Little R., Snowville,

Periconia atra Corda appeared on incubated dead stems of I collected at Eggleston,
Giles Co., Nov. 15, 1981 (81-Bc-2). (NR, U). This species is not listed by Farr et al.
(1989).

P. macrospina Lefebvre & Johnson appeared on incubated leaves of 7 collected
at the Little R. bridge, Rt. 613, Snowville, Montgomery Co., June 11, 1990 (90-29).

Rhynchosporium secalis (Oudem.) J. J. Davis, causing scald, was collected on 3
opposite Hethwood Shopping Center, Prices Fork Rd., Montgomery Co., June 26, 1982
(82-Bi-1). It is common on 3 in Montgomery and surrounding counties but we have
only a single collection. East of the Mississippi R., it is reported only from New
Hampshire (Farr et al., 1989). (NR, V).

Spermopora subulata (R. Sprague) R. Sprague, was collected at the Glade Rd.
Plant Pathology field plot area, Montgomery Co., on 3, June 14, 1994 (94-7). Although
it colonizes other Bromus spp., it is not previously reported on 3 (Farr et al., 1989).
(NR, U).

Deuteromycotina - Hyphomycetes:

Ascochyta agropyri-repentis (R. Sprague) Pumithalingham, described by Sprague
as Apiocarpella agropyri (Sprague, 1950), was collected on 6 on Rt. 860, S. slope of
the Blue Ridge, Franklin Co., July 9, 1989 (89-46). It may not belong in Apiocarpella
as stated by Sutton (1980), but neither is it typical of *Ascochyta*. Three-celled conidia are frequent and in two-celled conidia, the septum is nearer the basal tip. (NR, U).

*Ascochyta sorghi* Sacc., associated with leaf spots, was collected on 2 at the old Horticulture Farm, V.P.I. & S.U. (now The Market Place Shopping Center), Montgomery Co., June 15, 1982 (82-Bco-1); on Gap Mt., 1.5 mi. W. of U.S. 460, Montgomery Co., June 14, 1994; on Brush Mt., in N.W. corner of Roanoke Co., June 24, 1994 (94-16); on 4 at The Market Place, June 15, 1982 (82-Bj-1); at Franklin St. and N.S. Rwy., Christiansburg, Montgomery Co.; near Graysontown, Pulaski Co., June 11, 1990 (90-27); at the Little R. bridge on Rt. 613, Montgomery Co., June 11, 1990 (90-30); near the superintendent’s house, Claytor Lake S.P., Pulaski, May 30, 1991 (91-25); along N.S. Rwy., 1.5 mi. W. of Whitethorne, Montgomery Co., June 6, 1995 (95-17); on 6, S. slope of Blue Ridge, Rt. 860, near Endicott, Franklin Co., July 9, 1989 (89-46); on Rt. 712, Ellett, Montgomery Co., June 6, 1990 (90-22); on 7 near Graysontown, Pulaski Co., June 11, 1990 (90-26); at Little R. bridge on Rt. 613, Montgomery Co., June 11, 1990 (90-29); on Rt. 700, 1 mi. below Mt. Lake, Giles Co., May 26, 1991 (91-16); on 8 at the old Agronomy (Kipps) Farm, June, 1982 (82-Bt-1). All collections on 2, 4, 8 are NR, V. All collections on 6, 7 are NR, U. The fungus appears to be a common parasite, causing leaf spots on *Bromus* spp. in the region around Blacksburg.

*Colletotrichum graminicola* (Ces.) G. W. Wils., the cause of anthracnose, was collected on 1 on Rt. 708, in N.W. Montgomery Co., July 1981 (81-Bc-1), (NR, U); on 3 on the old Agronomy (Kipps) Farm, Montgomery Co., July 3, 1984 (84-Bi-1), (NR, V); on 4 near Graysontown, Pulaski Co., June 11, 1990, (90-27), (NR, U); on 6, S. slope of Blue Ridge on Rt. 860, Franklin Co., July 9, 1989 (89-46); and at Ellett on Rt. 712, Montgomery Co., June 6, 1990 (90-22), (NR, V); on 7 at 607 Lucas Dr., Blacksburg, Montgomery Co., July 16, 1990 (90-54), (NR, U). This fungus is sometimes pathogenic but it is difficult to tell whether it caused disease or was saprophytic. Since it is so easily detected, it is surprising that it has not been found on more species than are listed by Farr et al. (1989).

*Phaeosporia festucae* var. *muhlenbergia* R. Sprague ex Punithalingham was found on blades collected on 2 at the Glade Rd., Plant Pathology field plot area, Montgomery Co., June 14, 1994 (94-7). Several *Phaeosporia* ssp. have been found on grasses but only *P. aira* has been reported on a bromegrass and that from Alaska (Farr et al., 1989). (NR, U).

*Phloeospora graminearum* R. Sprague & Hardison was collected on 4 at Ellett, Rt. 712, Montgomery Co., June 6, 1990 (90-23), and near Graysontown, Pulaski Co., June 11, 1990 (90-27), (NR, U); on 7 also at Ellett on Rt 712, June 6, 1990 (90-24), and near Graysontown, Pulaski Co., June 11, 1990 (90-26). (NR, U). No *Phloeospora* ssp. are reported on *Bromus* ssp. by Farr et al. (1989).

*Stagonospora bromi* Smith & Ramsb., causing a purple-brown leaf spot, was collected on 3 at the old Agronomy (Kipps) Farm, Montgomery Co., June 1955 (55-Bi-1). (NR, V).

*S. montagnei* Cast. & Germano, (= *S. graminella* Sacc.), associated with leaf spots on 8 was collected at the Lovers Leap Overlook on U.S. 58, Patrick Co., May 23, 1993, (93-7). (NR, U).
Deuteromycotina - other:

*Rhizoctonia solani* Kuehn, causing sharp eyespot, was collected on 6 on Rt. 712, Ellett, Montgomery Co., June 6, 1990 (90-22). (NR, U).

**Calamagrostis** spp., reed grass

We have made no collections of *Calamagrostis* in Virginia. However, Farr et al. (1989) report B - *Ustilago striiformis* (Westend.) Neissl as occurring on *C. scribneri* Beal in Virginia; this grass is known only from Washington, Oregon, and Rocky Mountain states. The origin of this questionable report is Fischer (1953).

**Cenchrus** spp., sandbur

No collections have been made from *Cenchrus* spp.; however, Farr et al. (1989) report A - *Balansia claviceps* Speg., inflorescence blight on *C. echinatus* L. in Virginia where the grass is not known to occur. More than likely, the host was *C. pauciflorus* Benth. (= *C. longispinus* (Hack.) Fern.), which is widespread in Virginia (Roane, 1991).

**Chasmanthium** spp., wild oats

This genus includes grasses formerly in the genus *Uniola*. No fungi are listed for Virginia in this genus by Farr et al. (1989). We will list our collections under *Uniola*.

**Chloris verticillata** Nutt., windmill grass

The fungi listed below came from a colony of windmill grass growing in traffic islands at Franklin Rd., and Avenham Ave., Roanoke, collected Aug. 17, 1994.

Ascomycotina:

*Leptosphaerulina trifolii* (Rost.) Petr., was fruiting on freshly wilted leaves. Although considered primarily as a pathogen of forage legumes, this fungus also colonizes several grass species. Ascospores were muriform, 29-37 X 13-19 μm and were produced in broadly ovate to irregularly saccate asci measuring 85-90 X 50-60 μm (95-35) (see Graham & Luttrell, 1961). (NR, U).

Basidiomycotina:

*Ustilago chloridicola* Henne., inflorescence smut. This fungus is reported to be only in California by Farr et al. (1989). (NR, EU).

Deuteromycotina - Hyphomycetes:

*Bipolaris specifera* (Bainier) Subram. fruiting quickly on incubated leaves (94-35). (NR, U).

*B. zeicola* Stout also fruiting quickly on incubated leaves (94-35). (NR, U).

*Nigrospora sphaerica* (Sacc.) Mason was present on newly wilted leaves (94-35). (NR, U).

**Cinna arundinacea** L., stout woodreed

Ascomycotina:

*Phyllachora graminis* (Pers.) Fuckel, tar spot, was collected at Gloucester Court House, Aug. 8, 1993 (93-16). It has been known from Virginia for many years (Sprague, 1950).
Basidiomycotina:

*Puccinia recondita* Roberge ex Desmaz., II, was also collected at Gloucester C.H. (93-16). (NR, V).

Deuteromycotina - Coelomycetes:

*Colletotrichum graminicola* (Ces.) G. W. Wils., causing anthracnose, was collected at the lake shore, along Va. 16, Hungry Mother S.P., Smyth Co., Sept. 1, 1989 (89-35). (NR, U).

Deuteromycotina - Hyphomycetes

*Nigrospora sphaerica* (Sacc.) Mason, appeared quickly on incubated leaves collected with *C. graminicola* above (89-35). (NR, U).

In addition, Farr et al. (1989) list A - *Epichloe typhina* (Pers.:Fr.) Tul., and B - *Puccinia graminis* Pers. as occurring in Virginia.

*Cinna latifolia* (Trevir) Griseb., drooping woodreed

Ascomycotina:


*Cynodon dactylon* (L.) Pers., Bermudagrass

Plasmodiophoromycetes:

*Polymyxa graminis* Ledingham was identified in roots of plants collected in Broadus Flats near U.S. 360, Hanover Co., April 7, 1982 (82-Cd-1), and Aug. 23, 1983 (83-Cd-1). This fungus is the vector for three cereal viruses in Virginia. (NR, V).

Basidiomycotina:

*Ustilago cynodontis* (Henn.) Henn. has been sent to the Plant Clinic at V.P.I. & S.U. several times. A specimen in the class files was received in July 1964; a specimen from Pittsylvania Co., was received in the Clinic June 20, 1991 (91-43). (NR, V).

Deuteromycotina - Hyphomycetes:

*Acremoniella verrucosa* Tognini appeared on incubated leaves collected on the old Agronomy (Kipps) Farm, V.P.I. & S.U., Montgomery Co., Nov. 11, 1981 (81-Cd-1). The identity was established from the description and illustration given by Ellis (1971). (NR, U).

*Bipolaris cynodontis* (Marig.) Shoem., was the primary fungus in the collection above (81-Cd-1). Other collections are from Wingina, Nelson Co., Aug. 1, 1984 (84-Cd-1), Montgomery Tunnels, Montgomery Co., Sept. 12, 1989 (89-43) and July 22, 1995 (95-31). The fungus is common on Bermudagrass in this region throughout the growing season and has been known from Virginia for many years.

Deuteromycotina - Coelomycetes:

Ascochyta sorghi Sacc. was present on leaves in the collection above (95-31). (NR, U.).

Colletotrichum graminicola (Ces.) G. W. Wills. was also in the collection from Montgomery Tunnels (95-31). Surprisingly, it has not been reported on Cynodon in eastern states (NR, EU).

Dactylis glomerata L., orchardgrass

Mastigomycotina - Oomycetes:

Sclerospora graminicola (Sacc.) J. Schröt., appeared on one stem of D. glomerata in the backyard of our residence at 607 Lucas Dr., Blacksburg, Montgomery Co., July 12, 1995 (95-28). The plant had yellowed upper leaves and elongated spikelet structures. Lemmas were elongated up to 5 cm and were modified to have sheaths and blades, complete with ligules and collars. Sporangioles and sporangia were present on some spikelets; a photograph is available. Spores are papillate, ovoid to globose, measuring 11-12 X 10-11 μm. Since Sclerophthora macrospora (Sacc.) Thir., Shaw, and Naras., was the suspected fungus, a search was made for oospores; none was found. Sporangiospores measured in the low range for S. graminicola given by Weston (1924), i.e., 12-34 X 10-20 μm much smaller than sporoangiospores of S. macrospora, i.e., 60-70 X 38-52 μm (Sprague, 1950). A disease known as yellow tufts occurs in turf grasses in Virginia and is attributed to S. macrospora, but its presence has not been published. Even though the symptoms suggest to us that S. macrospora is the probable cause, no flooding occurred where the specimen was collected. Flooding is usually a prerequisite for infection by S. macrospora. Therefore, because the fungus has small sporangia and lacks oospores, we have assigned it to S. graminicola. (NR, U).

Ascomycotina:

Claviceps purpurea (Fr.:Fr.) Tul., the ergot fungus, has been collected at the old Agronomy Farm, Montgomery Co., July 1982 (82-Dg-2); on Gap Mt., off the forest service road 5 mi. W. of U.S. 460, Montgomery Co., July 10, 1983 (83-Dg-1); in the Roane backyard, Blacksburg, Montgomery Co., July 31, 1990 (90-74); on Rt. 619, Indian Valley, Floyd Co., July 4, 1991 (91-58), and at Dickey Ridge Recreation Center, Skyline Dr., Warren-Rappahannock Co. line, July 11, 1991 (91-62). Farr et al. (1989) list it as occurring in eastern states.

Erysiphe graminis DC. (now Blumeria graminis (DC.) E.O. Speer), causing powdery mildew, was collected on Gap Mt., 5 mi. W. of U.S. 460, Montgomery Co., July 3, 1982 (81-Dg-1). It is known from the eastern states (Farr et al., 1989).


Basidiomycotina:

Puccinia graminis Pers., stem rust, was collected at the Glade Rd., Plant Pathology plots Nov. 28, 1960 (60-Dg-1), Nov. 19, 1983 (83-Dg-2); at the Kipps farm Oct. 12, 1981 (81-Dg-1), Sept. 16, 1982 (82-Dg-4), and Sept. 25, 1982 (82-Dg-3); at the Roane yard July 31, 1990 (90-5) and at Lucas and Dickerson Dr., Blacksburg, July 1993 (93-24); the foregoing are from Montgomery Co.; at Claytor Lake S.P., Pulaski Co.,
Oct. 3, 1982 (82-Dg-6). The fungus has been known on this host in Virginia for many years.

_Uromyces dactyliidis_ Otth, stages II, III, rust, was collected at Williamsburg, James City Co., 1948 (48-Dg-1); on the old Agronomy (Kipps) Farm, Montgomery Co., Sept. 27, 1962; and at the Glade Rd. Plant Pathology plots, Aug. 20, 1957, Montgomery Co., (57-Dg-1), at Rt. 700 and Sinking Ck., Giles Co., Nov. 14, 1981 (81-Dg-5); on the V.P.I. & S.U. Horticulture Farm (now The Market Place) Montgomery Co., July 12, 1989 (89-Dg-4); at Claytor Lake S.P., Pulaski Co., June 17, 1990 (90-36); at in the Roane backyard, Montgomery Co., July 1993 (93-24).

_Ustilago striiformis_ (Westend.) Niessl, stripe smut, was collected on the Kipps farm, Montgomery Co., May 31, 1955 (55-Dg-1). Fischer (1953) lists it as from Virginia and eastern states.

Deuteromycetes - Hyphomycetes:

_Arthrobotrys oligospora_ Fresen. appeared on incubated leaves having scald-like lesions collected at the old Horticulture Farm (The Market Place), Montgomery Co., July 18, 1989 (89-Dg-5). The fungus is illustrated by Ellis & Ellis (1985). No doubt it is a saprophyte. (NR, U).


_Cercosporidium graminis_ (Fuckel) Deighton was collected at Williamsburg, James City Co., June 1948 (48-Dg-1); the Glade Rd. Plant Pathology plots, Montgomery Co., Sept. 1955 (83-Dg-2) and May 25, 1990 (90-11); at the old Horticulture Farm (The Market Place), Montgomery Co., July 12, 1989 (89-Dg-4); at Lucas and Dickerson Dr., Blacksburg, Montgomery Co., July 1993 (93-24); from County Agent, Hanover Co., Sept. 2, 1994 (Plant Clinic 94-1385); at Roane residence, Lucas Dr., Blacksburg, Montgomery Co., July 17, 1995 (95-29).

_Drechslera dactylidis_ Shoem., causing leaf spot, was sent to the Plant Clinic from Hanover Co., May 1, 1989 (89-Dg-1). Orchardgrass is not commonly grown in eastern Virginia; the fungus was believed to cause the grass to die out. (NR, V).

_Fusarium acuminatum_ Ellis & Everh. occurred on leaves collected at the Kipps farm Sept. 16, 1982 (82-Dg-4). Although it is listed as a root colonizing fungus (Farr et al., 1989), it has been found on leaves of several grasses. (NR, EU).

_Mastigosporium rubricosum_ (Dearn. & Barth.) Nannf., causing eyespot, was collected on Rt. 613 at the N. end of Mt. Lake, Giles Co., June 24, 1990 (90-45). (NR, V).

_Nigrospora sphaerica_ (Sacc.) Mason. appeared on leaves of plants sent to the Plant Clinic from Hanover Co., Sept. 2, 1994 (94-46). The fungus often appears on incubated leaves of various grasses and may be a saprophyte. (NR, U).

_Rhychosporium orthosporum_ Caldwell causing scald, has been collected on the S. slope of Gap Mt., 5 mi W. of U.S. 460, Montgomery Co., July 3, 1982 (82-Dg-1); at the old Horticulture Farm (The Market Place), Montgomery Co., Sept. 19, 1989 (89-48); at the lake shore, Claytor Lake S.P., Pulaski Co., June 17, 1990 (90-36); in Roane's yard, Blacksburg, Montgomery Co., July 1, 1994 (94-9) and July 17, 1995 (95-29); at Groundhog Mt., Blue Ridge Pkwy., Carroll Co., June 18, 1995 (95-23). (NR, V).
Deuteromycotina - Coelomycetes:

_Ascocytta graminea_ (Sacc.) R. Sprague & Johnson, associated with leaf spots, was collected 0.5 mi. W. of Whitethorne, Montgomery Co., June 9, 1991 (91-30). Spores measured 14-17 X 4-5 \( \mu \)m. (NR, U).

_A. sorghi_ Sacc., associated with leaf spots, was collected on Rt. 613 at the ridge overlooking Stoney Ck. Valley (= then the junction with Appalachian Tr.), Giles Co., June 24, 1990 (90-45). Spores measured 12-19 X 1.5-3.0 \( \mu \)m on the average, slenderer than those of _A. graminea_. (NR, V).

_Colletotrichum graminicola_ (Ces.) G. W. Wils., causing anthracnose, has been found in many collections. In Montgomery Co., at several locations in Blacksburg, Oct. 1981 (81-Dg-2); Oct. 12, 1981 (81-Dg-4); Nov. 11, 1983 (83-Dg-2); May 30, 1990 (90-16); July 1993 (93-24); on the old Horticulture Farm (The Market Place) July 12, 1989 (89-Dg-4); at Camp Fincastle, Botetourt Co., Oct. 29, 1989 (89-67); at Rustburg, Campbell Co., July 13, 1993 (93-15); at Groundhog Mt., Blue Ridge Pkwy., Carroll Co., June 18, 1995 (95-23); at Delaplane, Fauquier Co. (Plant Clinic no. 89-2318), Aug. 30, 1989 (89-Dg-6); on Rt. 613 at N. end of Mt. Lake, Giles Co. June 24, 1990 and May 26, 1991 (90-45, 91-20); along the lake shore, Claytor Lake S.P., Pulaski Co., Oct. 3, 1982, July 14, 1989, and June 17, 1990 (82-Dg-6, 89-8, 90-36). The fungus has been known on _D. glomerata_ in Virginia for many years. No doubt it can be found wherever the grass grows.

_Dilophospora alopecuri_ (Fr.) Fr., causing twist, was found at the eastern continental divide, old Horticulture Farm (The Market Place), Montgomery Co., June 26, 1989 (89-Dg-3). Williams (1964) reported its occurrence in Virginia but did not list a collection site.

_Pestalotiopsis disseminata_ (Thuem.) Stayaert. A fungus fitting the description of _Pestalotia disseminata_ Thuem. as described by Guba (1961, p. 139), appeared on incubated leaves collected on N. Main St. near U.S. 460, Blacksburg, Montgomery Co., May 30, 1990 (90-16). It appeared to be saprophytic; no representatives of this genus are reported on grasses (Farr et al., 1989). (NR, U).

_Phomato sorghina_ (Sacc.) Boerema., Doren., and Van Kest., occurred on leaves collected 0.5 mi. W. of Whitethorne, Montgomery Co., June 9, 1991 (91-39). Spores measured 4-6 X 2.3 \( \mu \)m thus fitting well within the dimensions given by Sprague (1950). (NR, U).

_Sphaerellopsis filum_ (Biv.-Bern. ex. Fr.) Sutton (= _Darluca filum_). A parasite of rusts. It was found in _Puccinia graminis_ on _D. glomerata_ collected at the Glade Rd. Plant Pathology plots, Blacksburg, Montgomery Co., Nov. 28, 1960 (see above, 60-Dg-1). (NR, U).

_Stagonospora arenaria_ (Sacc.) Sacc., causing purple-brown leaf blotch, has been collected from the Rocky Mount area, Franklin Co., Apr. 30, 1990 (90-12); Rt. 770 and Sinking Ck., Giles Co., June 12, 1993 (93-10); and the following sites in Montgomery Co.: S. slope Gap Mt., 5 mi W. of U.S. 460, July 3, 1982 (82-Dg-1); the Kipps farm, Sept. 16, 1982 (82-Dg-5); Glade Rd. Plant Pathology plots, Nov. 9, 1983 (83-Dg-2); near Pandapas Pond, June 9, 1985 (85-Dg-1); on the old Horticulture Farm (The Market Place) July 12, 1989 (89-Dg-4); Roane's backyard, Blacksburg, July 1990 (91-36); 0.5 mi. W. of Whitethorne, June 9, 1991 (91-39). Spores of _S. arenaria_
measure 25-60 X 2.5-5.0 μm and are nearly cylindrical, not constricted at the septa; compare with _S. maculata_ below. (NR, V).

*_S. maculata_ Castallani & Germano, purple leaf spot, is characterized by shorter, wider, boat-shaped spores, constricted at the septa, measuring 27-40 X 4.8-6.5 μm. Specimens were collected at Rustburg, Campbell Co., July 13, 1993 (93-15); at Groundhog Mt., Blue Ridge Pkwy., Carroll Co., June 18, 1995 (95-23); in Roane’s yard, Blacksburg, Montgomery Co., Oct. 1981, July 12, 1995, and July 17, 1995 (81-Dg-1, 95-28, 95-29); along the lake shore, Claytor Lake S.P., Pulaski Co., June 17, 1990 (90-36); on Brush Mt. near the Audie Murphy monument, Roanoke Co., June 14, 1994 (94-10). The two _Stagnospora_ spp. sometimes occur in mixed infections; both are widespread in Virginia. (NR, V).

**Deuteromycotina - other:**

_Rhizoctonia solani_ Kuehn, causing foliage blight, was collected along the lake shore, Claytor Lake S.P., Pulaski Co., July 14, 1989 (89-3). According to Farr et al. (1989), Drake (1958) reported _R. solani_ on _D. glomerata_. Drake said that _R. solani_ occurred on _Lotus_ cvs. planted in mixed stands with _D. glomerata_. Thus, this is the first report of _R. solani_ on _D. glomerata_ in Virginia. (NR, V).

**Danthonia, oatgrass**

Three species of _Danthonia_ occur in Virginia; we have identified fungi occurring on _D. spicata_ (L.) Beauv. ex. Roem. & Schult., and _D. compressa_ Aust.

**Ascomycotina:**

_Atkinsonella hypoxylon_ (Peck) Diehl, black choke, was found on _D. spicata_ along the hiking trail in woods behind the swimming area, Claytor Lake S.P., Pulaski Co., June 21, 1991 (91-52), and on _D. compressa_ along the Blue Ridge Pkwy., between Rocky Knob and Mabry Mill, Patrick Co., June 18, 1995 (95-22). Diehl (1950) cites specimens in herbaria from Virginia as early as 1918 but does not state which species was the host. The fungus is generally distributed in eastern states on _D. compressa_ and _D. spicata_ (Farr et al., 1989).

**Basidiomycotina:**

_Ustilago residua_ G. P. Clinton, panicle smut, was collected on _D. spicata_ along the War Spur Trail off Rt. 613 (Salt Sulphur Tnpk.), Giles Co., June 22, 1980, and May 26, 1991 (80-Ds-1, 91-18); and on the S. slope of Gap Mt., 1.5 mi. W. of U.S. 460, Montgomery Co., May 31, 1989 (89-76). It was collected on _D. compressa_ on the War Spur Trail June 24, 1990 (90-44). The fungus has long been known on _Danthonia_ spp. in Virginia (Farr et al., 1989).

**Deuteromycotina - Hyphomycetes:**

_Curvularia geniculata_ (Tracy & Earle) Boedijn, leaf mold, was collected on _D. spicata_ at White Top Mt., Smyth-Grayson Co. line, Aug. 31, 1989 (89-69); and on S. slope of Gap Mt., 5 mi. W. of U.S. 460, Montgomery Co., July 3, 1982 (82-Ds-2). (NR, U).

_Drechslera campanulata_ (Lév.) Sutton, causing leaf spot, was collected on _D. spicata_ along Forest Service road 630 off Rt. 621, N.E. Montgomery Co., June 9, 1991 (91-40). (NR, U).


Deuteromycotina - Coelomycetes


Colletotrichum graminicola (Ces.) G. W. Wils., anthracnose, was collected on D. spicata along the Forest Service road 630 off Rt. 631, N.E. Montgomery Co., June 9, 1991 (91-40). It is reported only from N.W. United States (Farr et al., 1989). (NR, EU). It also occurred on D. compressa along the Blue Ridge Pkwy, Patrick Co., June 18, 1995 (95-22). (NR, EU).

Phomatospora dinemaspornium J. Webster, occurred on incubated leaves of D. compressa from the Blue Ridge Pkwy. site above, collected June 18, 1995 (95-22). (NR, U).

Pseudoseptoria donacis (Pass.) Sutton, causing halo spot, occurred on leaves of D. spicata collected 1 mi. W. of U.S. 460 on S. slope of Gap Mt., Montgomery Co., July 3, 1982 (82-Ds-2). Spores were lunate, measuring 15-29 X 2.5 µm. Sprague (1950) describes the variability of spores from different localities and hosts. Most records are from N.W. United States; our collection is rare for eastern states. (NR, U).

Stagonospora simplicior Sacc. & Briard or S. brachyelytri Greene was collected on D. spicata. Spores were cylindrical to slightly tapered, with rounded ends, sometimes slightly constricted at the three septa, cells vacuolate as on S. simplicior, measuring 22-25 X 6-7 µm (very uniform). Spores of S. simplicior are broader and longer, 28-38 X 8-9 µm; those of S. brachyelytri are 13-33 X 5-7 µm (Sprague, 1950). We tentatively assign our collection to S. brachyelytri. S. subseriata (Desmaz.) Sacc. is known on a western Danthonia but it has boat-shaped spores. In any case, our collection made June 9, 1991, on Forest Service road 630, off Rt. 631, N.E. Montgomery Co. is a NR, U.

In addition, Farr et al. (1989) list A - Epichloe typhina (Pers:Fr.) Tul, causing choke, on D. compressa in Virginia and on D. spicata in eastern U.S.

Dichanthelium spp., panic grasses

Dichanthelium (formerly subgenus of Panicum) is represented by 20 species in Virginia (Roane, 1991). Many of those listed by Hitchcock & Chase (1950) have been reduced to synonyms by Gould, Clark, & Shaw (Gould and Clark, 1983). We have identified fungi on eight former Panicum spp., now regarded as Dichanthelium spp. In the discussion, species will be referred to by number; for synonyms, see Roane (1991); in Farr et al. (1989), see under Panicum.
1. *D. acuminatum* (Swartz.) Gould & Clark, southern panic.
2. *D. bosci* (Poir.) Gould & Clark, no common name.
4. *D. commutatum* (Schult.) Gould & Clark, variable panic.
5. *D. depauperatum* (Muhl.) Gould, starved panic.

Ascomycotina:

*Mycosphaerella allicina* (Fr.:Fr.) Vestergr. occurred on 6 in the Audie Murphy Monument area, Brush Mt., near Craig-Roanoke Co. line, June 24, 1994 (94-14).

Ascospores were 1-septate, constricted, cells unequal, hyaline, 17-19 X 6-7 µm. See Ellis & Ellis, p. 464 (1985). (NR, U).

*Paraphaeosphaeria michotii* (Westend.) O. Eriksson, was collected on leaves of *I*. The fungus was associated with bright tan lesions on leaves collected along the lake shore at Claytor Lake S.P., Pulaski Co., July 14, 1989 (89-4). See Ellis & Ellis pp. 464, 540 (1985). (NR, U).

*Phyllachora punctata* (Schwein.) Orton & Stevens has been collected on *I* along the lake shore, Claytor Lake S.P., Pulaski Co., July 14, 1989 (89-4) (NR, U); on 2 along the lake-ridge trail, Hungry Mother S.P., Smyth Co., Sept. 3, 1989 (89-37); and along Mt. Rogers Recreation Area Hqtrs. nature trail Va. 16, Smyth Co., Aug. 14, 1994 (94-28), (NR, U); on 3 at Little R. bridge on Rt. 613, Montgomery Co., Aug. 4, 1989 (89-22) and along Va. 8 & Dodds Ck., S. of Floyd, Oct. 3, 1994 (95-9); on 4 along lake-ridge trail, Hungry Mother S.P., Smyth Co., Sept. 3, 1989 (89-39), (NR, U). In addition, *D. depauperatum* and *D. sphaerocarpum* (Ell.) Gould are listed by Farr et al. (1989) as hosts of this fungus in Virginia.

Basidiomycotina:

A rust fungus occurred on 2 at Hungry Mother S.P., Smyth Co., Sept. 3, 1989 (89-38). No teliospores were present. Specimens were sent to J. F. Hennen of the Arthur (Rust) Herbarium, Purdue Univ. but he could not make a positive identification. *Puccinia emaculata* Schwein. and *Uromyces graminicola* Burrill are reported to occur in Virginia on unidentified *Panicum* spp. (Farr et al., 1989) which in the revised genus may include *Dichanthelium* spp.

Deuteromycotina - Hyphomycetes:

*Exserohilum monoceras* (Drechs.) Leonard & Suggs, was associated with elliptical, zonate, brown lesions on *J* collected on the lake shore. Claytor Lake S.P., Pulaski Co., Aug. 11, 1989 (89-33). (NR, U).


*Nigrospora sphaerica* (Sacc.) Mason, was present on dead culms of living plants of *I* collected on the old Horticulture Farm (The Market Place), Montgomery Co., Sept. 19, 1989 (89-49). (NR, EU).
Pyricularia grisea (Cooke) Sacc., associated with bright tan leaf spots on 1 was collected at the lake shore, Claytor Lake S.P., Pulaski Co., July 14, 1989 (89-4). (NR, U).

Ramularia graminicola Peck, was associated with leaf spots on 2 collected on the lake-ridge trail, Hungry Mother S.P., Smyth Co., Sept. 3, 1989 (89-37); and was associated with linear to elliptical leaf spots on 3, collected on the old Horticulture Farm (The Market Place), Montgomery Co., June 21, 1989 (89-5). The description of this fungus is given by Sprague (1950). Peck’s (1891) original description was not available. Although our collection satisfactorily fits Ramularia, the specific epithet may be questioned; however, this genus has not been found previously on 2 and 3. (NR, U).

Tetraploa aristata Berk. & Broome was associated with leaf streaks on 3, collected on the old Horticulture Farm (The Market Place), Montgomery Co., Oct. 11, 1989 (89-54). (NR, U).

Deuteromycotina - Coelomycetes:

Ascphyta sorghi Sacc., was collected on 3 by Diane Reaver along Sinking Ck. at the end of Rt. 770, 4 mi. E. of Newport, Giles Co., July 13, 1990 (90-53). (NR, U).

Chaetospora sp., associated with small brown spots occurred on 7, collected at Hungry Mother S.P., Smyth Co., Sept. 3, 1989 (89-77). Pycnidia at first submerged, erumpent, smooth, later becoming nearly superficial and crowned with 10 or more brown, acute, 2-5-septate setae, up to 160 μm long. Pycnidiospores measured 60-70 X 1.5-2.0 μm, were 2-5-septate (mostly 3-sept.). A second collection on 1 came from the old Horticulture Farm (The Market Place), Montgomery Co., Sept. 19, 1989 (89-49). Pycnidia measured only up to 45μm and spores were 45-60 X 1 μm smaller, than in the Smyth Co. collection. Only C. vignae on Vigna unguiculata (L.) Walp. is listed by Farr et al. (1989). This fungus genus is not listed on grass hosts. (NR, U).

Cecletotrichum graminicola (Ces.) G. W. Wils., causing anthracnose, was collected on 2 at Adner, Gloucester Co., Sept. 24, 1989 (89-51). (NR, U).

Phomatospora dinemasporeum J. Webster, occurred on 7 collected at Hungry Mother S.P., Smyth Co., Sept. 3, 1989 (89-77). (NR, U). This fungus is described and illustrated by Sutton (1980).

Phoma sorghina (Sacc.) Boeroema, Doren., & Van Kesteren, with ellipsoid pycnidiospores measuring 3-9 X 2-3 μm was collected on 3 at the old Horticulture Farm (The Market Place), Montgomery Co., Oct. 11, 1989 (89-54). (NR, U).

Phyllosticta anthoxella R. Sprague, having bacillar-shaped, guttulate spores measuring 5-7 X 0.8-1.5 μm associated with linear stripes on overwintered culms of 3, was collected at the lake shore, Claytor Lake S.P., Pulaski Co., Mar. 25, 1991 (91-4). The species from which this fungus was originally collected by Sprague (1950), Anthoxanthum odoratum L., was growing close to the stand of 3. (NR, U).

Phyllosticta healdii R. Sprague, having biguttulate oval spores, measuring 11-15 X 3.5-5.0 μm was collected on 1 at the lake shore, Claytor Lake S.P., Pulaski Co., July 14, 1989 (89-4), (NR, EU); and on 6 near the Audi Murphy Monument on Brush Mt., N.W. Roanoke Co., June 24, 1994 (94-14). (NR, U). Sprague (1950) described P. healdii from Panicum huahueae Ashe, included by Gould & Clark (1983) in I D. acuminatum (Roane, 1991).
Septoria arechavaletae Wint. was collected on 6 on Forest Service Rd. 630 off Rt. 621, N.E. Montgomery Co., June 9, 1991 (91-33). Spores were 3-8-septate, filiform-vermiform 50-100 X 1.0-1.2 μm Sprague (1946) questions the validity of this species and suggests it should be included in S. tandilensis. The only collection of S. arechavaletae to date was that of Fairchild on Panicum capillare L. in Virginia (Sprague 1946). We hesitatingly call our collection a NR, U.

S. tandilensis Speg., causing a leaf spot, was collected along the lake shore at Claytor Lake S.P., Pulaski Co. on 1 July 14, 1989, and on 3 Oct. 10, 1988. Pycnidia were very prevalent in lesions on leaves in the collections. (NR, V).


**Digitaria spp., crabgrasses**

Roane (1991) lists five species of Digitaria in Virginia; we have collected and identified fungi on only two species.

1. **D. ischaemum** (Schreb.) Schreb. ex. Muhl.
2. **D. sanguinalis** (L.) Scop.

Ascomycotina:

*Pleospora* sp. or *Pyrenophora* sp. We have found an ascomycetous fungus with sunken to erumpent, smooth pseudothecia, bearing cylindric to slightly saccate bitunicate asci, and muriform, dark brown, ascospores, with 3-5 transverse septa, constricted at the septa, blunt on one end, more tapering on other, measuring 29-36 X 11-17 μm, occurring on frosted leaves of I at Camp Fincastle, Botetourt Co., Oct. 29, 1989. More careful work is needed before we can make a definite determination. Nothing approaching *Pyrenophora* or *Pleospora* has been reported on crabgrass.

Basidiomycotina:

*Ustilago syntherismae* (Schwein.) Peck, has been identified on I from Augusta Co., (V.P.I. & S.U. Pl. Clinic no. 82-2794), Oct. 6, 1982 (82-Di-2); from Collinsville at U.S. 220 (Business) and Rt. 732, Henry Co., Sept. 25, 1994; from Christiansburg, Montgomery Co., Sept. 28, 1982 (82-Di-1); on 2 from Roane’s yard, Blacksburg, Montgomery Co., Oct. 12, 1981 (81-Ds-1); on I, Sept. 16, 1995 (95-36) and 2 Sept. 8, 1991, both in the cabin area, Claytor Lake S.P., Pulaski Co. There are previous reports on I and 2 and also on *D. filiformis* (L.) Koel. from Virginia (Farr et al., 1989). Although the hosts flower from June to October, smutted racemes do not appear before late August in Virginia.

Deuteromycotina - Hyphomycetes:

Curvularia trifolii (Kauf.) Boedijn was collected on frost-killed leaves of *I* from Camp Finchastle, Botetourt Co., Oct. 29, 1989. Like *C. intermedia*, *C. trifolii* has 3-septate, asymmetrical spores, but the enlarged second cell forces the middle septum below the median. There is a protruding hilum. (NR, EU).

Pyricularia grisea (Cooke) Sacc. occurs commonly on *I* throughout Virginia. Collections have been made from Charlotte, King & Queen, Montgomery, and Pulaski Cos. beginning in early August. Oddly, the fungus occurs on *I* & *2* throughout their ranges, but we have no records of it on *I*.

*Tetraploa aristata* Berk. & Broome was collected on *2* at Broadus Flats, Hanover Co., Aug. 23, 1983. (NR, U).

**Deuteromycotina - Coelomycetes:**

*Collectotrichum graminicola* (Ces.) G. W. Wils., was collected on *I* near the woods behind the marina at Claytor Lake S.P., Pulaski Co., Oct. 30, 1995 (95-49). (NR, V).

**DISCUSSION AND SUMMARY**

We have listed fungi on Virginia grass genera *Aegilops* through *Digitaria* (A through D). We have made no effort to determine whether the fungus in an association is saprophytic or parasitic. When we incubated plant parts, *Alternaria*, *Cladosporium*, *Epicoccum*, and *Penicillium* invariably appeared. We regarded them as saprophytes and ignored them. The fungi we reported seemed to be associated with a symptom or disintegration of the host we collected. Despite our position, we recognize that some of our reported fungi may be only saprophytes but their frequent association with different components of the incubated material prompted us to accept them as a regularly occurring partner. Their presence is recognized, and they are regarded as elements of our mycoflora. Many associations are reported as new for the United States (NR, U), for eastern United States (NR, EU), or for Virginia (NR, V). The large number of new records may be attributed to the fact that no one before us has collected extensively the fungus-grass associations occurring in Virginia.

**ACKNOWLEDGEMENTS**

We are grateful to Dr. L. D. Moore for availing to us the facilities and secretarial pool of the Department of Plant Pathology, Physiology and Weed Science. We are pleased to have this support as it allows us in our retirement to make original contributions to the natural history of Virginia. We are especially grateful to Judy Fielder for her patience in converting our scripted notes into publishable form.

**LITERATURE CITED**


