

Cephalosporium Stripe of Cereals in Virginia

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ABSTRACT

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In May 1977, Cephalosporium stripe symptoms were observed on scattered plants of volunteer rye growing in a field near Blacksburg, Virginia. In May 1979, stripe symptoms were observed on rye plants growing in a housing development near Blacksburg where rye straw had been used as a lawn mulch. In June 1979, Cephalosporium stripe was observed on the McCormick Farm at Steeles Tavern and also in a new location on the Blacksburg Agronomy Farm. Origin of the inoculum for these outbreaks is unknown.

Cephalosporium stripe of wheat incited by *Cephalosporium gramineum* Nis. & Ika. (= *Hymenula cerealis* Ell. & Ev.) was first observed in Virginia in 1975 in experimental nurseries at Blacksburg (4); none has yet been observed in commercial fields. Bruehl (1) first observed Cephalosporium stripe on wheat in the United States. The organism was reported by Bruehl (2) to cause stripe symptoms in artificially inoculated rye; Gerdemann and Weibel (3) reported the first incidence of natural infection of rye. We report here two incidents of natural infection of rye and occurrence of Cephalosporium stripe at a new location.

In May 1977, scattered plants of volunteer rye growing in a field near Blacksburg, Virginia, were observed to have Cephalosporium stripe symptoms. In May 1979, stripe symptoms were observed on rye plants growing in a housing development near Blacksburg (Fig. 1) where rye straw had been used as a mulch in establishing a lawn. The area was wooded and had no history of cereal crops. In both cases, *C. gramineum* was isolated. In June 1979, wheat in variety

trials on the Shenandoah Valley Research Station (the original Cyrus McCormick Farm) showed symptoms of stripe. Barley in an adjacent nursery also had symptoms of Cephalosporium stripe, but we were unable to isolate *C. gramineum*. Cephalosporium stripe was also observed in a new location on the Blacksburg Agronomy Farm that was not reported in 1976.

The origin of the inoculum for these outbreaks of Cephalosporium stripe is unknown. Wheat seed for yield trials are produced in a stripe-free area, and other centers of infection are unknown. The rye straw for mulching the lawn was reportedly from Montgomery County south of Blacksburg, but we have been unable to locate the source. Baled straw, however, could be a source of *C. gramineum*.

LITERATURE CITED

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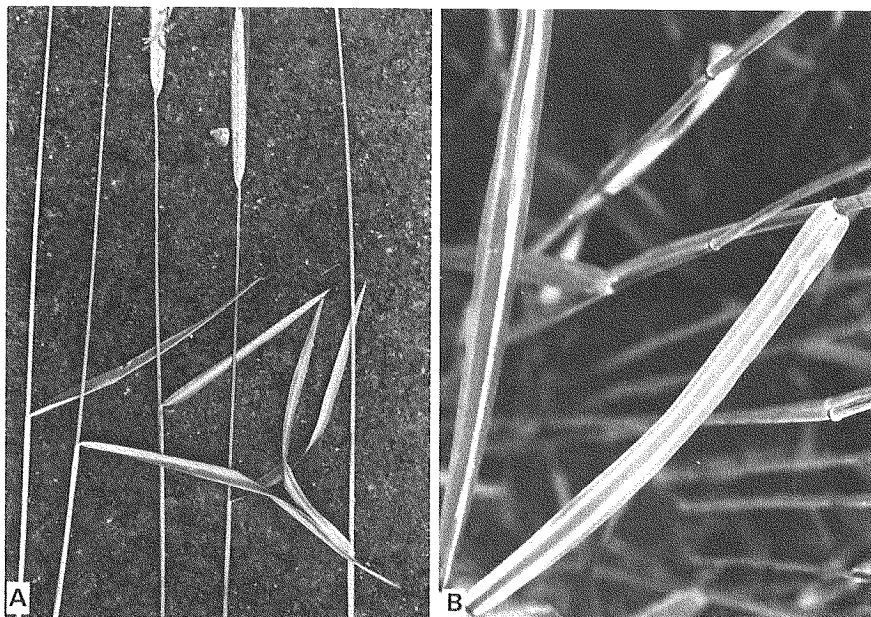


Fig. 1. Cephalosporium stripe in rye: (A) Symptoms in flag leaves. (B) Close-up of symptoms in penultimate leaves.

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