

CEREAL RUST BULLETIN

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From:
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The small grain harvest is underway from northern Georgia to south central Kansas. In the spring sown small grain growing area the crop has emerged and maturity is near normal.

Wheat stem rust. In early June, traces of stem rust were observed on McNair 701 (susceptible host) in a south central Kansas plot. During late May, light amounts of wheat stem rust were observed in north central Texas plots at harvest. This was less rust than was found in the same plots in 1993. This year, light amounts of wheat stem rust were found scattered throughout the lower Mississippi Valley wheat growing area at maturity. In all of these areas only minimal stem rust losses are expected.

Wheat leaf rust. During early June, light leaf rust was found on flag leaves in plots and fields in northern Kansas. Leaf rust is much lighter in this area than last year because moisture was less than normal, very little leaf rust overwintered, and temperatures were cooler than normal in the early spring.

In early June, leaf rust was light in southern Nebraska fields on the flag leaves at late milk. On June 3, trace amounts of leaf rust were observed in winter wheat plots in an east central Minnesota nursery at the late heading stage. Also, in early June, light leaf rust was observed in southeastern North Dakota fields at early flowering.

In early June, light leaf rust was found in southwestern Indiana plots at the late milk growth state. By early June, 15-30% severities were observed in south central and eastern shore Virginia plots.

In the Pacific Northwest, in early June, severe leaf rust was observed in plots at Corvallis, Oregon and light rust was found in the Pullman, Washington area.

The preliminary leaf rust races identified in the 1994 survey (Table 1) were identified in previous surveys.

TABLE 1. Wheat leaf rust races identified through June 14, 1994.

Prt code	Virulence formula ¹	Number of isolates by state			
		AL	LA	OK	TX
MBG-10	1,3,10,11	8	2		5
MBR-10	1,3,3ka,10,11,30				12
MCD-10	1,3,10,17,26				2
MDB-10	1,3,10,24				2
MGD-10	1,3,10,16,17				2
MFB-10	1,3,10,24,26				7
PBR-10,18	1,2c,3,3ka,10,11,18,30	2			
TBD-10	1,2a,2c,3,10,17				2
TBG-10	1,2a,2c,3,10,11				3
TDB-10	1,2a,2c,3,10,24			2	9
TDG-10	1,2a,2c,3,10,11,24				13
TFB-10	1,2a,2c,3,10,24,26				1
Number of isolates		10	2	2	60
Number of collections		5	1	1	31

¹ Near isogenic resistances evaluated: *Lr* 1,2a,2c,3,3ka,9,10,11,16,17,18,24,26,30

Wheat stripe rust. By late May, stripe rust was severe in northwestern Washington plots and light in fields. In other areas of the Pacific Northwest, stripe rust was light this year which was due to the lower than normal rainfall and higher than normal springtime temperatures.

Oat stem rust. During late May, light amounts of oat stem rust were found in north central Texas plots. No oat stem rust has yet been detected in the central plains.

Oat crown rust. In early June, crown rust was light on oats in southern Wisconsin and southern Minnesota.

Barley stem rust. As of June 14, no stem rust has been reported on barley in the U.S. this year. Limited amounts of barley are grown commercially in the southern states and central Plains states and barley stem rust often is not found in this area.

Barley leaf rust. There have been no new reports of barley leaf rust since the May 31 bulletin.

Barley stripe rust. There have been no new reports of barley stripe rust since the May 16 bulletin.

Rye rusts. On June 3, traces of leaf rust were found on rye at anthesis at the Rosemount, Minnesota nursery. In late May, trace amounts of rye leaf rust were found on the lower leaves in south central Wisconsin. No stem rust has been observed on rye this year.

Crown rust on Buckthorn. During early June, light to moderate aecial infections were reported on buckthorn in southern Minnesota, west central Minnesota, southeastern North Dakota and northeastern South Dakota. By June 10, crown rust was moderate on oats growing adjacent to buckthorns in St. Paul, Minnesota.

Stem rust on Barberry. During the first week in June, the aecial stage of stem rust was found on barberry bushes in southeastern Minnesota. In early June, traces of stem rust were found on bushes in three locations in Dane County, Wisconsin.

Fig. 1. Leaf rust severities in wheat fields on June 14, 1994.

