

Mini data sheet on *Rice stripe necrosis benyvirus*

Added in 1999 - Deleted in 2002

Reasons for deletion:

Rice stripe necrosis virus has been included in EPPO Alert List for more than 3 years and during this period no particular international action was requested by the EPPO member countries. In 2002, it was agreed that it could be deleted, considering that sufficient alert has been given.

Rice stripe necrosis benyvirus (a new virus disease of rice in Colombia)

Why	<i>Rice stripe necrosis benyvirus</i> came to our attention because it was reported as new virus disease of rice in Colombia causing serious losses.
Where	Since 1991, the disease has been observed in the eastern plains of Colombia. <i>Rice stripe necrosis benyvirus</i> was previously reported only from West Africa. It was first found in 1977 in Côte d'Ivoire, and then in Liberia, Nigeria, Sierra Leone. The virus and its fungal vector have now been identified in all the major rice-producing regions of Colombia (Huila, Tolima, Meta, Casanare, Antioquia, Cordoba, Cundinamarca). It is suspected that this new virus disease may have been introduced into Columbia on rice germplasm material from Africa. Distribution in Latin America might be broader than currently known.
On which plants	Rice (<i>Oryza sativa</i>).
Identity	<i>Rice stripe necrosis benyvirus</i> (RSNV).
Damage	Infected plants showed striking symptoms. Emerging central leaves are highly deformed, showing a 'zigzag' growth (hence the common name 'entorchamiento': crinkling). Affected leaves show chlorotic or yellow stripes and later become necrotic. Plant growth is severely reduced, and when affected at an early stage, seedlings may die. In Colombia, disease incidence increased from an average of 6 % in 1993 to 18 % in 1994, in areas where it first appeared. Yield losses have been estimated at 20-40 %, and some rice fields in the Eastern plains have even been abandoned.
Pathway	Rice seeds? from Colombia and African countries where it occurs, infested soil.
Transmission	Transmitted by a fungus, <i>Polymyxa graminis</i> . The main factor responsible for the relatively rapid spread of the disease in Columbia is probably through shared use of contaminated agricultural machinery.
Possible risks	Rice is grown in some parts of the EPPO region, severe losses are reported and movement through germplasm (seeds?) is suspected.
Source(s)	Hibino, H. (1996) Biology and epidemiology of rice viruses. Annual Review of Phytopathology, 34, 249-274. Morales, F.J. (1996) Rice virus emerges in Latin America. CARAPHIN News, no. 14, p 4 & 8. Morales, F.J.; Arroyave, J.A.; Velasco, A.C.; Castano, M. (1995) [Partial characterization of crinkling or necrotic stripe virus on rice in Colombia.] Fitopatologia Colombiana, 19(1), 48-54. Morales, F.J.; Ward, E.; Castaño, M.; Arroyave, J.A.; Lozano, I.; Adams, M.J. (1999) Emergence and partial characterization of rice stripe necrosis virus and its fungus vector in South America. European Journal of Plant Pathology, 105(7), 643-650.

EPPO RS 97/019, 2000/018

Panel review date 2002-01

Entry date 1999-01
Deleted in 2002