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Soybean rust weekly outlook: May 15, 2005

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Abstract

As of May 15, no new development of soybean rust has been observed since the detection of soybean rust in volunteer soybeans in Seminole County in southern Georgia. Potential pathway from known source areas. We used historical weather data to assess the potential spore deposition areas from central Florida where soybean rust has been detected. For modeling purposes, a large quantity of spores was assumed, although in reality, spore production so far is limited.

Keywords

Plant Pathology

Disciplines

Agricultural Science | Agriculture | Plant Pathology

INTEGRATED CROP MANAGEMENT



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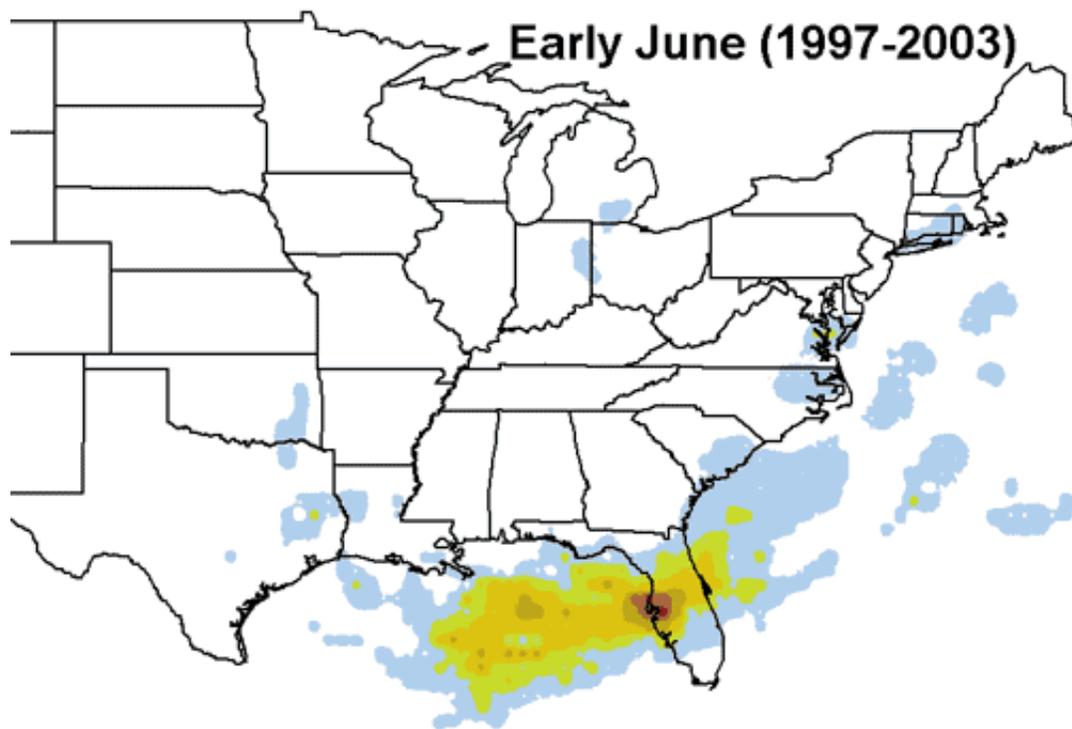
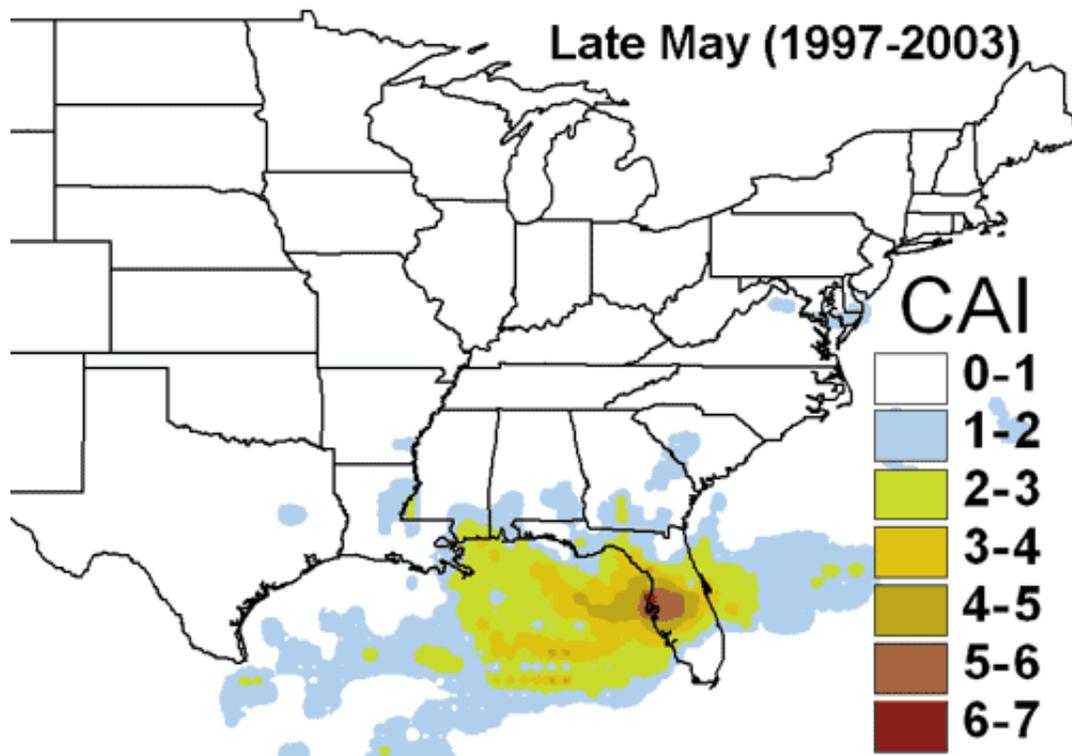
Status of soybean rust

As of May 15, no new development of soybean rust has been observed since the detection of soybean rust in volunteer soybeans in Seminole County in southern Georgia.

Potential pathway from known source areas. We used historical weather data to assess the potential spore deposition areas from central Florida where soybean rust has been detected. For modeling purposes, a large quantity of spores was assumed, although in reality, spore production so far is limited. Results show that even with the assumption of a large amount of spore production, the probability for spores to spread to other states, as indicated by the brown areas on the map, is significantly reduced compared with April and early May. Keep in mind that the presence of spores does not necessarily mean occurrence of the disease. An example of this can be found in southern Brazil, where spores are present every year, but an epidemic occurred only one year in that region. For the possibility of spores moving out of Georgia, please refer to the [May 9 issue](#) [1] of the *ICM Newsletter*.

Outlook

We should have passed the window for an epidemic that meets the worst-case scenario, although the risk of having outbreaks in the northern soybean production regions is still largely undetermined. In the worst-case scenario, the disease would establish itself in parts of the northern soybean production regions before July. Because the disease has not been found in other Gulf Coast states besides Florida and southern Georgia, the time to find the disease in Iowa should be no earlier than July with the current situation or even later if the disease does not move in the next few weeks.



Computer simulation of historical weather data (1997-2003) for potential deposition areas of soybean rust spores from central Florida if a large amount of spores are produced there. The upper map is for the last half of May and the lower map is for the first half of June. The CAI represents a qualitative index (0-7) for possibility of spore deposition.

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[1] <http://www.ipm.iastate.edu/ipm/icm/2005/5-9-2005/rustoutlook.html>

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