

Production practices that affect leaf spot risk

Practice	Worst case	Points	Best case	Points
Rotation	Continuous peanut	33	No peanut \geq 4 years	8
Cultivar	Highly susceptible	30	Bailey, Sullivan, Wynne	10
History	Poor control	20	New peanut land – no history	5
Irrigation	Frequent	15	None	5
Planting date	After May 21	10	Before May 21	5
Tillage	Conventional	10	Reduced	5
Total Risk		148		38

LEAF SPOT RISK IS NEVER ZERO, even with very long rotations or on new ground. Spores of the leaf spot fungus can get a foothold after they blow in from neighboring fields or even other states. Once spores arrive, it may only take a few humid days for a leaf spot epidemic to get started if plants are not protected.

Rotation: Long rotation has the biggest single effect on the risk of leaf spot problems. Growers can reduce leaf spot risk points by two-thirds (from 33 to 11 points) just by growing peanut in three-year rotations compared to continuous peanut. Risk is at its lowest after rotations of four years or more.

Cultivar: Bailey, Sullivan and Wynne perform better than older cultivars and compare favorably with the most resistant runner types. Bailey and Sullivan also seem to maintain yield under leaf spot pressure.

History: Growers need to be especially careful in fields that have had leaf spot problems in the past. Problem fields will benefit from longer rotations and more aggressive disease control.

Cultural practices: Reduced tillage and early planting (before May 21) will reduce leaf spot risk a little. Irrigation will increase leaf spot risk. Treat irrigated fields on a calendar schedule rather than using weather-based leaf spot advisories.

Other factors:

Weather: Warm humid nights are very favorable for leaf spot. Rains can delay sprays, delay harvests, and wash off or excessively weather fungicides. Shorter spray intervals or additional sprays may be called for in rainy weather. Sprays may need to start earlier in the season the further south you go in the state because of generally more favorable weather for disease.

Risk of leaf spot may be reduced in dry seasons, or during periods of low humidity. It is important to hold off on leaf spot sprays during hot, dry weather to reduce the risk of spider mite outbreaks. **Consult leaf spot advisories to confirm low leaf spot risk before delaying sprays.** Poor airflow, shade, and heavy good vine growth create humid conditions that favor leaf spot.

Application: Good spray coverage is essential, especially with surface protectant fungicides. Higher spray volumes and smaller droplet sizes provide the best coverage.

Timeliness and scouting: Make timely sprays. **Do not used extended intervals except as recommended for the product or by leaf spot advisories.** Use caution; an extended interval schedule could leave many newly emerged leaves unprotected during periods of rapid vine growth.

Determining leaf spot risk is an inexact science and questions about fungicide performance make prediction even harder. Growers should stay alert for leaf spot problems, no matter what a risk tool says or how meticulously they spray. This means regular scouting. Leaf spot starts to increase in small areas at first. Check low or shady areas of a field especially carefully because these are likely to be first places that leaf spots develop. Act quickly with additional sprays if more than 20% of the leaves **in any part of the field** have spots. **It is too late to control a leaf spot epidemic once it is active across an entire field.**