PEANUT Rx

# MINIMIZING DISEASES OF PEANUT IN THE SOUTHEASTERN UNITED STATES


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# ASSESS DISEASE RISK IN YOUR FIELD AND DEVELOP A PEANUT RX

This worksheet will lead you through the four-step process of determining your disease risk level in order to customize a Peanut Rx™ for your individual field using the reverse side of this worksheet and with the assistance of your Syngenta representative.

For each of the risk index factors, identify which option best describes the situation for your field and add the index value associated with each choice to obtain your overall disease risk value. This worksheet does not contain all of the varieties included in the 2021 Peanut Rx or the notes that accompany each factor. To view the complete 2021 Peanut Rx, visit the University of Georgia peanut website at **www.ugapeanutteam.com.**

## Assess Your Disease Risk

| Variety Selection | | | | |
|---|---|---|---|---|
| Variety[1] | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points | |
| | | | White Mold | |
| AU NPL 17[2] | 10 | 15 | 15 | |
| Bailey[3] | 10 | 25 | 10 | |
| Florida Fancy[2] | 25 | 20 | 20 | |
| FloRun™ '331'[2] | 15 | 20 | 15 | |
| Georgia-06G | 10 | 20 | 20 | |
| Georgia-07W | 10 | 20 | 15 | |
| Georgia-09B[2] | 20 | 25 | 25 | |
| Georgia-12Y[5] | 5 | 15 | 10 | |
| Georgia-14N[2,4] | 5 | 15 | 15 | |
| Georgia-16HO[2] | 10 | 25 | 20 | |
| Georgia-18RU[1] | 10 | 25 | 20 | |
| Georgia Green | 30 | 20 | 25 | |
| Sullivan[2] | 10 | 25 | 15 | |
| Tifguard[4] | 10 | 15 | 15 | |
| TifNV-HiOL[2,4] | 5 | 15 | 15 | |
| TUFRunner™ '297'[2] | 10 | 25 | 20 | |
| TUFRunner™ '511'[2] | 20 | 30 | 15 | |

| Planting Date | | | | |
|---|---|---|---|---|
| Peanuts are planted: | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points | |
| | | | White Mold | Limb Rot |
| Prior to May 1 | 30 | 0 | 10 | 0 |
| May 1 to May 10 | 15 | 5 | 5 | 0 |
| May 11 to May 25 | 5 | 10 | 0 | 0 |
| May 26 to June 10 | 10 | 15 | 0 | 5 |
| After June 10 | 15 | 15 | 0 | 5 |

| Plant Population (final stand, not seeding rate) | | | | |
|---|---|---|---|---|
| Plant stand: | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points | |
| | | | White Mold | Limb Rot |
| Less than 3 plants/ft | 25 | NA | 0 | NA |
| 3 to 4 plants/ft (3) | 10 (15) | NA | 0 (0) | NA |
| More than 4 plants/ft | 5 | NA | 5 | NA |

| At-plant Insecticide | | | | |
|---|---|---|---|---|
| Insecticide used | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points | |
| | | | White Mold | Limb Rot |
| None | 15 | 5 | NA | NA |
| Other than Thimet® 20G | 15 | 5 | NA | NA |
| Velum Total | 15 | 0 | NA | NA |
| Thimet 20G | 5 | 0 | NA | NA |

| Row Pattern | | | | |
|---|---|---|---|---|
| Peanuts are planted in: | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points | |
| | | | White Mold | Limb Rot |
| Single rows | 10 | 0 | 5 | 0 |
| Twin rows | 5 | 0 | 0 | 0 |

| Tillage | | | | |
|---|---|---|---|---|
| Tillage type | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points | |
| | | | White Mold | Limb Rot |
| Conventional | 15 | 10 | 0 | 0 |
| Reduced | 5 | 0 | 5 | 5 |

| Classic® Herbicide | | | | |
|---|---|---|---|---|
| Classic usage | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points | |
| | | | White Mold | Limb Rot |
| Classic applied | 5 | NA | NA | NA |
| No Classic applied | 0 | NA | NA | NA |

| Crop Rotation (with a non-legume crop) | | | | |
|---|---|---|---|---|
| Years between peanut crop | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points | |
| | | | White Mold | Limb Rot |
| 0 | NA | 25 | 25 | 20 |
| 1 | NA | 15 | 20 | 15 |
| 2 | NA | 10 | 10 | 10 |
| 3 or more | NA | 5 | 5 | 5 |

| Field History | | | | |
|---|---|---|---|---|
| Have you had a problem controlling these diseases? | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points | |
| | | | White Mold | Limb Rot |
| No | NA | 0 | 0 | 0 |
| Yes | NA | 10 | 15 | 10 |

| Irrigation | | | | |
|---|---|---|---|---|
| Does the field receive irrigation? | Spotted Wilt Points | Leaf Spot Points | Soilborne Disease Points | |
| | | | White Mold | Limb Rot |
| No | NA | 0 | 0 | 0 |
| Yes | NA | 10 | 5 | 10 |

[1] Adequate research data is not available for all varieties with regards to all diseases. Additional varieties will be included as data to support the assignment of an index value are available.
[2] High oleic variety
[3] Bailey has increased resistance to *Cylindrocladium* black rot (CBR) compared to other varieties commonly planted in Georgia.
[4] Tifguard, TifNV-HiOL and Georgia 14-N have excellent resistance to the peanut root-knot nematode.
[5] Georgia-12Y appears to have increased risk to Rhizoctonia limb rot and precautions should be taken to protect against this disease.

## Develop Your Peanut Rx

Once you have calculated your total risk for each fungal disease, utilize the most conservative fungicide program as your guide for customizing a per-field prescription spray program.

### Programs developed through the cooperation of

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Clemson University

## Calculate Your Severity Points

Fill in the following table to calculate your severity points for each of the four major peanut diseases given the 10 determining factors. Total each column to establish your disease index values.

| | Spotted Wilt | Leaf Spot | White Mold | *Rhizoctonia* Limb Rot |
|---|---|---|---|---|
| Variety | | | | |
| Planting Date | | | | |
| Plant Population | | | | |
| At-plant Insecticide | | | | |
| Row Pattern | | | | |
| Tillage | | | | |
| Classic Herbicide | | | | |
| Crop Rotation | | | | |
| Field History | | | | |
| Irrigation | | | | |
| Total Index Value | | | | |

## Interpret Your Risk Total

Point total range for tomato spotted wilt = 35-155.
Point total range for leaf spot = 10-105.
Point total range for white mold = 10-95.
Point total range for Rhizoctonia limb rot = 15-75.

| | Spotted Wilt Points | Leaf Spot Points | Soilborne Points | |
|---|---|---|---|---|
| | | | White Mold | Limb Rot |
| **High Risk** | ≥ 115 | 65-105 | 55-80 | TBD |
| High Risk for fungal diseases: Growers should always use full fungicide input program in a high-risk situation. | | | | |
| **Moderate Risk** | 70-110 | 40-60 | 30-50 | TBD |
| Medium Risk for fungal diseases: Growers can expect better performance from standard fungicide programs. Reduced fungicide programs in research studies have been successfully implemented when conditions are not favorable for disease spread. | | | | |
| **Low Risk** | ≤ 65 | 10-35 | 10-25 | TBD |
| Low Risk for fungal diseases: These fields are likely to have the least impact from fungal disease. Growers have made the management decisions which offer maximum benefit in reducing the potential for severe disease; these fields are strong candidates for modified disease management programs that require a reduced number of fungicide application. | | | | |

When tomato spotted wilt virus incidence is high statewide or in your region, even fields with a low risk level may experience significant losses. Consider the following recommendations to reduce your spotted wilt risk level:

- Use less susceptible varieties
- Adjust your planting date
- Consult the complete Peanut Rx for additional options that may also provide limited benefit

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