

FUNGICIDES

FUNGICIDE PROGRAMS

ADVISORY

## Comparison of commonly used peanut fungicides 2021

Fungicide oz/A <sup>z</sup>	Group	Strengths/Roles	Limitations
Abound (azoxystrobin) 12 to 24 oz	11	<ul style="list-style-type: none"> <li>•Very good stem rot control</li> <li>•Excellent Rhizoctonia limb and pod rot control at 18 to 24 oz</li> <li>•Very good leaf spot and web blotch control where still effective</li> </ul>	<ul style="list-style-type: none"> <li>•Many leaf spot populations are resistant. Higher rates will NOT help.</li> <li>•Must be mixed with an effective leaf spot fungicide such as Bravo (chlorothalonil)</li> <li>•Less effective against established stem rot infections than some other products</li> <li>•Rain or irrigation is needed to optimize stem rot control</li> </ul>
Alto (cyproconazole) 5.5 oz	3	<ul style="list-style-type: none"> <li>•Systemic leaf spot control</li> <li>•Good choice for first spray</li> <li>•Very good leaf spot control when mixed with Bravo</li> </ul>	<ul style="list-style-type: none"> <li>•Mix with chlorothalonil</li> <li>•Little control of soil borne pathogens</li> <li>•30 day PHI</li> </ul>
Approach Prima (picoxystrobin + cyproconazole) 5 to 6.8 oz	3 + 11	<ul style="list-style-type: none"> <li>•Systemic leaf spot control</li> <li>•First spray is best niche, similar to Alto + Bravo</li> <li>•Very good leaf spot control when mixed with Bravo</li> </ul>	<ul style="list-style-type: none"> <li>•Mix with chlorothalonil</li> <li>•Little control of soil borne pathogens</li> <li>•30 day PHI</li> </ul>
Bravo (chlorothalonil) 1 to 1.5 pt (or generic)	M	<ul style="list-style-type: none"> <li>•Low cost</li> <li>•Resistance management</li> <li>•Very good leaf spot control</li> <li>•Use for last spray</li> </ul>	<ul style="list-style-type: none"> <li>•No control of soil borne pathogens</li> <li>•Full season use can flare spider mites and make Sclerotinia blight worse</li> <li>•Non-systemic with no curative action</li> </ul>
Convoy (flutoloniil) 16 to 32 oz	7	<ul style="list-style-type: none"> <li>•Very good – excellent stem rot control</li> <li>•Long residual at high rates (see label)</li> </ul>	<ul style="list-style-type: none"> <li>•NO leaf spot control</li> <li>•<b>MUST be mixed with a leaf spot fungicide</b></li> <li>•Good option for tank mixing with Miravis for stem rot control</li> <li>•40 day PHI</li> </ul>

<sup>z</sup> Recommended rates. The lowest label rate may not be shown.

Recommended number of applications or rotations are based on FRAC guidelines for a program with 5 to 6 sprays per season and may be more conservative than indicated on the label.

**Comparison of commonly used peanut fungicides 2021 (cont)**

Fungicide oz/A	Group	Strengths/Roles	Limitations
Elatus (benzovindiflupyr + azoxystrobin) 7.3 to 9.5 oz	7 + 11	<ul style="list-style-type: none"> <li>•Very good – excellent stem rot, limb rot and pod rot control</li> <li>•Good systemic leaf spot control</li> <li>•Longer residual at high rates</li> </ul>	<ul style="list-style-type: none"> <li>•Consider mixing with an effective leaf spot fungicide (e.g., chlorothalonil) for extra protection</li> <li>•9.5 oz can be tank-mixed with Miravis to for extended stem rot control</li> </ul>
Excalia (inpyrfluxam) 3 to 4 oz	7	<ul style="list-style-type: none"> <li>•Very good – excellent stem rot control</li> </ul>	<ul style="list-style-type: none"> <li>•NO leaf spot control</li> <li>•<b>MUST be mixed with a leaf spot fungicide</b></li> <li>•Good option for tank mixing with Miravis for stem rot control</li> <li>•40 day PHI</li> </ul>
Fontelis (penthiopyrad) 16 to 24 oz	7	<ul style="list-style-type: none"> <li>•Very good to excellent stem rot control</li> <li>•Very good leaf spot control</li> <li>•Some suppression of Sclerotinia blight at high rate (24 oz)</li> </ul>	<ul style="list-style-type: none"> <li>•No more than 2 applications of unmixed group 7 fungicides due to resistance risk</li> <li>•Alternate with fungicides from a different group (not group 7). Do not used in alternation with Miravis due to resistance risk.</li> </ul>
Headline (pyraclostrobin) 6 to 15 oz	11	<ul style="list-style-type: none"> <li>•Rapid uptake, good residual and wash-off resistance</li> <li>•Excellent systemic leaf spot and web blotch control in areas where still effective</li> </ul>	<ul style="list-style-type: none"> <li>•<b>Many populations are resistant. Higher rates will NOT help.</b></li> <li>•<b>Must be mixed with an effective leaf spot fungicide such as Bravo (chlorothalonil)</b></li> <li>•High rates are needed for stem rot control and stem rot control can be erratic</li> </ul>
Lucento 5.5 oz (Flutriafol + Bixafen)	3 + 7	<ul style="list-style-type: none"> <li>•Very good systemic leaf spot and stem rot control</li> </ul>	<ul style="list-style-type: none"> <li>•Moderate resistance risk. Rotate with fungicides in other groups</li> <li>•Do not alternate with Miravis or Fontelis</li> </ul>
Microthiol Diperss (sulfur) 5 lb.	M	<ul style="list-style-type: none"> <li>•May enhance performance of group 3 fungicides when mixed with them</li> </ul>	<ul style="list-style-type: none"> <li>•<b>Provides very limited control when used alone. Must be mixed with a leaf spot fungicide</b></li> </ul>

**Comparison of commonly used peanut fungicides 2021 (cont)**

Fungicide oz/A	Group	Strengths/roles	Limitations
Miravis 3.4 oz (Pydiflumetofen)	7	<ul style="list-style-type: none"> <li>•Very long residual (21 to 28 days)</li> <li>•Excellent leaf spot control</li> <li>•Best fit is at 60 DAP</li> </ul>	<ul style="list-style-type: none"> <li>•Does not control stem rot</li> <li>•Protectant only</li> <li>•<b>Resistance risk is high if overused or used as a rescue treatment</b></li> <li>•Alternate with a fungicide from a different group (not group 7). The NC control season usually is too short to allow for more than one spray of Miravis per season.</li> </ul>
Priaxor (pyraclostrobin + fluxapyroxad) 6 to 8 oz	11 + 7	<ul style="list-style-type: none"> <li>•Good residual and wash-off resistance</li> <li>•Very good systemic leaf spot control</li> <li>•Stem rot control at 8 oz rate</li> </ul>	<ul style="list-style-type: none"> <li>•Consider mixing with chlorothalonil for extra protection</li> <li>•Resistance risk</li> </ul>
Propulse 13.6 oz (prothioconazole + fluopyram)	3 + 7	<ul style="list-style-type: none"> <li>•Excellent leaf spot and stem rot control</li> <li>•Suppresses nematodes when applied in early season (see label for details)</li> <li>•Long residual</li> </ul>	<ul style="list-style-type: none"> <li>•Expensive</li> <li>•Resistance risk</li> </ul>
Provost Silver 13 oz (Prothioconazole + tebuconazole)	3 + 3	<ul style="list-style-type: none"> <li>•Very good stem rot, limb rot and pod rot control</li> <li>•Very good leaf spot control</li> </ul>	<ul style="list-style-type: none"> <li>•Resistance risk; tank mix or alternate with other chemistry to prevent loss of efficacy</li> <li>•Add sulfur to boost activity against leaf spots</li> </ul>
Revytek 12 – 15 oz (Mefentrifluconazole + fluxapyroxad + pyraclostrobin)	3 + 7 + 11	<ul style="list-style-type: none"> <li>•Very good leaf spot and stem rot control</li> <li>•Has some systemic activity</li> <li>•Faster uptake than other group 3's</li> <li>•Good rainfastness</li> </ul>	<ul style="list-style-type: none"> <li>•Less systemic than some other group 3's</li> <li>•3-way mix limits choices of partners to use for mixing or alternating sprays</li> </ul>
Tebuconazole 7.2 oz (generic)	3	<ul style="list-style-type: none"> <li>•Very good – excellent stem rot, limb rot and pod rot control</li> <li>•Systemic and redistributes well</li> <li>•Inexpensive</li> </ul>	<ul style="list-style-type: none"> <li>•Poor leaf spot control due to fungicide resistance in most locations; not effective against late leaf spot due to resistance</li> <li>•<b>Always mix with Bravo or other product for leaf spot control</b></li> </ul>

**Comparison of commonly used peanut fungicides 2021 (cont)**

Fungicide oz/A	Group	Strengths/roles	Limitations
Topguard (flutriafol) 7-14 oz	3	<ul style="list-style-type: none"> <li>•Good systemic leaf spot control, some stem rot control</li> <li>•Mix with Bravo for first spray</li> </ul>	<ul style="list-style-type: none"> <li>•Most useful tank mixed with another a.i.</li> <li>•Moderate resistance risk</li> <li>•Add sulfur to boost activity against leaf spots</li> </ul>
Topsin M 70 WP 8 oz dry wt (Thiophanate-methyl; many brands and formulations)	1	<ul style="list-style-type: none"> <li>•Very good leaf spot control</li> <li>•Use in tank mixes</li> </ul>	<ul style="list-style-type: none"> <li>•<b>Must be tank mixed with an effective leaf spot fungicide due to resistance risk</b></li> <li>•Very high risk of resistance development; use no more than once per season in a 5-spray program</li> </ul>
Generic premixes of azoxystrobin + tebuconazole Variable rates	3 + 11	<ul style="list-style-type: none"> <li>•Good stem rot and limb rot control</li> </ul>	<ul style="list-style-type: none"> <li>•<b>Probably ineffective against leaf spot in many locations</b></li> <li>•<b>Mix with Chlorothalonil</b></li> <li>•Usually have less a.i. than rate recommended for the equivalent brand-name product</li> </ul>
Omega (fluazinam) 1 to 1.5 pt	C5	<ul style="list-style-type: none"> <li>•Controls Sclerotinia blight. Level of control depends on rate and frequency used.</li> <li>•Long residual (21 to 28 days)</li> <li>•May control/suppress stem rot</li> <li>•Use in addition to a leaf spot control program</li> </ul>	<ul style="list-style-type: none"> <li>•Expensive</li> </ul>

### Peanut leaf spot control calendar and objectives

Approx. Date	July 5	July 19	Aug 2	Aug 16	Aug 30	Sep 13
Approx. DAP	45 - 50	60 - 65	75 - 80	90 - 95	105 - 110	120 - 125 (see advisory)
Objective	Leaf spot control, curative activity, and resistance management	Leaf spot and stem rot control	Leaf spot and stem rot control	Leaf spot and stem rot control, curative activity; Sclerotinia blight suppression	Leaf spot control and resistance management if last planned spray	Leaf spot control and resistance management
Objective	All sprays: alternate fungicide groups to prevent resistance development					
<b>Critical periods for control</b>						
Leaf spot	5 or 6 sprays total needed for control unless advisories indicate otherwise					
Stem rot	Midseason: 1 to 3 sprays total needed for control					
Sclerotinia blight	Mid to late season: 1 to 3 sprays needed for control Follow advisories to determine critical times					

Dates are approximate. Dates can be earlier for early planted peanut and/or peanut planted in North Carolina's southern counties.

- Assumes a good rotation and a history of normal disease pressure**
- Start no later than **R3 (approx. 50 DAP) or July 10, whichever comes first**
  - After the first spray, stay on a 14-day schedule or use advisory

Spray programs are **examples**. Other products that meet the objective for each spray and follow good resistance management practices can be used. See the fungicide sorting tool for other possible choices.

**SPRAY PROGRAM EXAMPLE**

Scenario: Sullivan, good rotation, some stem rot, leaf spot control good last time, a little Sclerotinia blight

Approx. Date	July 5	July 19	Aug 2	Aug 16	Aug 30	Sep 13
Approx. DAP	45 - 50	60 - 65	75 - 80	90 - 95	105 - 110	120 - 125 (see advisory)
Objective	Leaf spot control, curative activity, and resistance management	Leaf spot and stem rot control	Leaf spot control and stem rot control	Leaf spot and stem rot control, curative activity	Leaf spot control and resistance management if last planned spray	Leaf spot control and resistance management
	Alto 5.5 oz + Bravo 1.5 pt (3 + M) <b>OR</b> Approach Prima 6.8 oz + Bravo 1.5 pt (3 + 11+ M)	Revytek 12 – 15 oz (3 + 7 + 11) <b>OR</b> Provost Silver 13 oz (3 + 3)	Bravo 1.5 pt (no stem rot activity) (M)	Revytek 12 – 15 oz (3 + 7 + 11) <b>OR</b> Provost Silver 13 oz (3 + 3) <b>OR</b> for Sclerotinia blight suppression: Fontelis 16 – 24 oz (7)	Bravo 1.5 pt	Bravo 1.5 pt (M) (depending on advisory and digging date)
<b>Critical periods for control</b>						
Leaf spot	<b>5 or 6 sprays total needed for control unless advisories indicate otherwise</b>					
Stem rot	<b>Midseason: 1 to 3 sprays total needed for control</b>					
Sclerotinia blight	<b>Mid to late season: 1 to 3 sprays needed for control</b> <b>Follow advisories to determine critical times</b>					

**Examples for illustration only.** The use of brand names and any mention or listing of commercial products or services does not imply endorsement by North Carolina State University or discrimination against similar products or services not mentioned. Other brand names may be labeled for use on peanuts. Individuals who use agricultural chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. Be sure to obtain current information about usage regulations and examine a current product label before applying any chemical. For assistance, contact your county's Cooperative Extension agent.

**SPRAY PROGRAM EXAMPLE**

Sullivan, 4 year or more rotation, some stem rot, leaf spot control good last time, **no Sclerotinia blight**; low cost program

<b>Approx. Date</b>	<b>July 5</b>	<b>July 19</b>	<b>Aug 2</b>	<b>Aug 16</b>	<b>Aug 30</b>	<b>Sep 13</b>
<b>Approx. DAP</b>	<b>45 - 50</b>	<b>60 - 65</b>	<b>75 - 80</b>	<b>90 - 95</b>	<b>105 - 110</b>	<b>120 - 125</b> (see advisory)
<b>Objective</b>	Leaf spot control, curative activity, and resistance management	Leaf spot and stem rot control	Leaf spot and stem rot control	Leaf spot and stem rot control, curative activity	Leaf spot control and resistance management if last planned spray	Leaf spot control and resistance management
	Alto 5.5 oz + Bravo 1.5 pt (3 + M)	Tebuconazole 7.2 oz + Bravo 1.5 pt (3 + M)	Tebuconazole 7.2 oz + Bravo 1.5 pt (3 + M)	Alto 5.5 oz + Bravo 1.5 pt (3 + M)	Bravo 1.5 pt (M)	Bravo 1.5 pt (M) (depending on advisory and digging date)
Alternate choices for each spray above	As above	Bravo 1.5 pt + Convoy 16 oz (M + 7) <b>OR</b> Bravo 1.5 pt + azoxystrobin 18 oz (M + 11)	As above	Provost Silver 13 oz (3 + 3) <b>OR</b> Revytek 12-15 oz (3 + 7 + 11)	As above	Bravo 1.5 pt (M) (depending on advisory and digging date)
<b>Critical periods for control</b>						
<b>Leaf spot</b>	<b>5 or 6 sprays total needed for control unless advisories indicate otherwise</b>					
<b>Stem rot</b>	<b>Midseason: 1 to 3 sprays total needed for control</b>					
<b>Sclerotinia blight</b>	<b>Mid to late season: 1 to 3 sprays needed for control</b> <b>Follow advisories to determine critical times</b>					

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**NC STATE** EXTENSION

**SPRAY PROGRAM EXAMPLE**

Irrigated and/or high risk of leaf spot and stem rot pressure; **21-day Miravis application**

Barbara Shew

Department of Entomology and Plant Pathology

Approx. Date	←21 days→			Aug 23	Sept 6	Sept 20
	July 5	July 19	Aug 9			
Approx. DAP	45 - 50	60 - 65	75 - 80	90 - 95	105 - 110	120 - 125 (see advisory)
Objective	Leaf spot control, curative activity, and resistance management	Leaf spot and stem rot control	Leaf spot and stem rot control; systemic with some curative activity	Leaf spot and stem rot control	Leaf spot control and resistance management if last planned spray	Leaf spot control and resistance management
Program with 21 day interval after Miravis	Alto 5.5 oz + Bravo 1.5 pt (3 + M)	Miravis 3.4 oz + Tebuconazole ("Folicur") 7.2 oz (7 + 3)	Provost Silver 13 oz + 5 lb sulfur (3 + M)	Tebuconazole 7.2 oz + Bravo 1.5 pt (3 + M)	Bravo 1.5 pt (M)	Bravo 1.5 pt (M) (depending on advisory and digging date)
Alternate choices (examples)	<b>Substitute for Alto:</b> Approach Prima 6.8 oz (3 + 11)	<b>Substitute for tebuconazole:</b> Convoy 24 - 32 oz (7) <b>OR</b> Eliatus 9.5 oz (7 + 11) <b>OR</b> Excalia (7) 3 - 4 oz	<b>Substitute for sulfur:</b> 1 pt Bravo (M)	<b>Substitute for Bravo + tebuconazole:</b> Fontelis 16 oz + Bravo 1 pt (7 + M) <b>OR</b> Revytek 12 oz (3 + 7 + 11)	Add tebuconazole 7.2 oz (3) if stem rot still active	Bravo 1.5 pt (M) (depending on advisory and digging date)
<b>Critical periods for control</b>						
Leaf spot	<b>5 or 6 sprays total needed for control unless advisories indicate otherwise</b>					
Stem rot	<b>Midseason: 1 to 3 sprays total needed for control</b>					
Sclerotinia blight	<b>Mid to late season: 1 to 3 sprays needed for control</b> <b>Follow advisories to determine critical times</b>					

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Barbara Shew  
 Department of Entomology and Plant Pathology  
 Sullivan, excellent rotation, some stem rot, leaf spot control good last time, no Sclerotinia blight; **28 day Miravis application**

**SPRAY PROGRAM EXAMPLE**

Sullivan, excellent rotation, some stem rot, leaf spot control good last time, no Sclerotinia blight; **28 day Miravis application**

Approx. Date	July 5	July 19	Aug 2	Aug 16	Aug 30	Sep 13
Approx. DAP	45 - 50	60 - 65	75 - 80	90 - 95	105 - 110	120 - 125 (see advisory)
Objective	Leaf spot control, curative activity, and resistance management Alto 5.5 oz + Bravo 1.5 pt (3 + M)	Leaf spot and stem rot control Miravis 3.4 oz + Elatus 9.5 oz [7 + (7 + 11)]	Leaf spot and stem rot control skip	Leaf spot and stem rot control, curative activity Provost Silver 13 oz (3 + 3)	Leaf spot control and resistance management if last planned spray Bravo 1.5 pt (M)	Leaf spot control and resistance management Bravo 1.5 pt (M) (depending on advisory and digging date)
Alternative choices to the above	<u>Substitute for Alto:</u> Approach Prima (3 + 11)	<u>Substitute for Elatus:</u> Convoy 32 oz (7) <b>OR</b> Tebuconazole 7.2 oz – 2 weeks of activity (3)	skip	<u>Substitute for Provost Silver:</u> Tebuconazole 7.2 oz + Bravo 1.5 pt (3 + M) <b>OR</b> Azoxystrobin 18 oz + Bravo 1.5 pt (11 + M)	As above	As above
<b>Critical periods for control</b>						
Leaf spot	<b>5 or 6 sprays total needed for control unless advisories indicate otherwise</b>					
Stem rot	<b>Midseason: 1 to 3 sprays total needed for control</b>					
Sclerotinia blight	<b>Mid to late season: 1 to 3 sprays needed for control</b> <b>Follow advisories to determine critical times</b>					

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**SPRAY PROGRAM WORKSHEET**

Scenario:

Approx. Date	July 5	July 19	Aug 2	Aug 16	Aug 30	Sep 13
Approx. DAP	45 - 50	60 - 65	75 - 80	90 - 95	105 - 110	120 - 125 (see advisory)
Objective	Leaf spot control, curative activity, and resistance management	Leaf spot and stem rot control	Leaf spot control and stem rot control	Leaf spot and stem rot control, curative activity	Leaf spot control and resistance management if last planned spray	Leaf spot control and resistance management
<b>Critical periods for control</b>						
Leaf spot	5 or 6 sprays total needed for control unless advisories indicate otherwise					
Stem rot	Midseason: 1 to 3 sprays total needed for control					
Sclerotinia blight	Mid to late season: 1 to 3 sprays needed for control Follow advisories to determine critical times					

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# Fungicide selection tool

Use the tool to sort fungicides by the disease controlled, efficacy, FRAC group, PHI, and timing. To use the tool, click on the arrow at the top of the column of interest. The Excel file and more information are at

<https://peanut.ces.ncsu.edu/2020/07/fungicide-selector-tool-peanut-notes-no-116-2020/>

Example:  
Click here to find fungicides that control stem rot

ING STATE EXTENSION	Product and recommended rate	Active	Group	Residual activity (days)	PHI	Recommended no. apps in a 6 to 8 spray program	Recommended timing	Leaf spots (early and late)	Stem rot	Sclerotinia blight	Rhizoctonia limb rot
	Abound (and generic azoxystrobin) 12 to 24 oz	Azoxystrobin	11	14	14	1 to 2	mid-late	Poor	V Good	None	V Good/Ex
	Alto 5.5 ampro-m + Bravo 10 to 24 oz (tank mix)	Cyproconazole + Bravo	3 + M	14	30	1 to 2	early-mid	V Good	Poor	None - may increase	Poor?
	Approach Prima 6.8 oz + Bravo (tank mix)	Cyproconazole + prothioconazole + Bravo	3 + M	14	30	1 to 2	early-mid	V Good	Poor	None - may increase	Poor?
	Bravo (and generic chlorothalonil) 16 to 24 oz	Chlorothalonil	M	14	14	2 to 3 alone or tank mixed	early-mid-late	V Good	None	None - may increase	None
	Convoy 16 oz	Flutolanil	7	14	40	1 to 2	mid	None	V Good/Ex	None	V Good
	Convoy 32 oz	Flutolanil	7	28	40	1	mid	None	V Good/Ex	None	V Good
	Elatus 9.5 oz	Benzovaldipyr + azoxystrobin	7 + 11	21-28	30	1 to 2	early-mid	Good	Ex	Suppression	V Good
	Endura 8 to 10 oz	Boscalid	7	14	14	1 to 3	by advisory	Fair	Poor	V Good	?
	Funtelis 16 oz	Penthiopyrad	7	14	14	1 to 2	early-mid	V Good	Ex	Suppression	Good
	Funtelis 24 oz	Penthiopyrad	7	14	14	1	mid-late	V Good	Ex	Fair	V Good
	Lucanto 5.5 oz	Bifenox + flutriafol	7 + 11	14	14	1 to 2	mid	Ex	None	None	None
	Miravis 3.4 oz	Pydiflumetofen	7	21-28	14	1 to 2, not consecutive	60 DAP	Ex	None	None	?
	Omega 16 oz (or Lektivar)	Fluzoxonam	29	21	30	1 to 3	by advisory	Suppression	Good	V Good	Fair/Good?
	Omega 24 oz (or Lektivar)	Fluzoxonam	29	21-28	30	1 to 2	by advisory	Suppression	V Good	Ex	Fair/Good?
	Priaxor 4 to 6 oz	Fluxapyroxad + pyraclostrobin	7 + 11	14	14	1 to 2	early-mid	V Good	Fair	None	Fair/Good?
	Priaxor 8 oz	Fluxapyroxad + pyraclostrobin	7 + 11	14	14	1 to 2	early-mid	V Good	Fair	None	Fair/Good?
	Prolare 5.7 oz	Prothioconazole	3	14	14	1 to 2	early-mid	V Good	Good	None	Good
	Propulse 13.6 oz	Fludioxyan + prothioconazole	7 + 3	14	14	1 to 2	IF band early-mid	V Good/Ex	V Good/Ex	None	V Good
	Provost S/Swer 13 oz	Prothioconazole + tebuconazole	3 + 3	14	14	1 to 2	early-mid	Ex	Ex	Suppression	V Good
	Reveltech 12 to 15 oz	Mefenfluoconazole + fluxapyroxad + pyraclostrobin	3 + 7 + 11	14	14	1 to 2	mid	V Good	V Good	None	V Good
	Tebuconazole (generic) 7.2 oz	Tebuconazole	3	14	14	1 to 2	mid	Poor	V Good	None	?
	Topguard 7 to 14 oz	Flutriafol	3	14	14	1 to 2	mid	Fair	Good	None	V Good
	Topmix 8 to 10 oz, (in tank mix only)	Thiophanate-methyl	1	14	14	1 to 2 (tank mix only)	see tank mix partner	V Good	None	None	None

# Tank mix suggestions

For stem rot control, mix Miravis (group 7) with one of the following:

Elatus (7 + 11) at 9.5 oz/A – 21 to 28 days

Convoy (group 7) at 32 oz/A – 28 days

Fontelis (group 7) at 16 oz/A 14 days

Tebuconazole (group 3) - 14 days of protection

To enhance leaf spot control by some group 3 fungicides such as Provost Silver or Topguard mix with:

Sulfur 5 lb/A

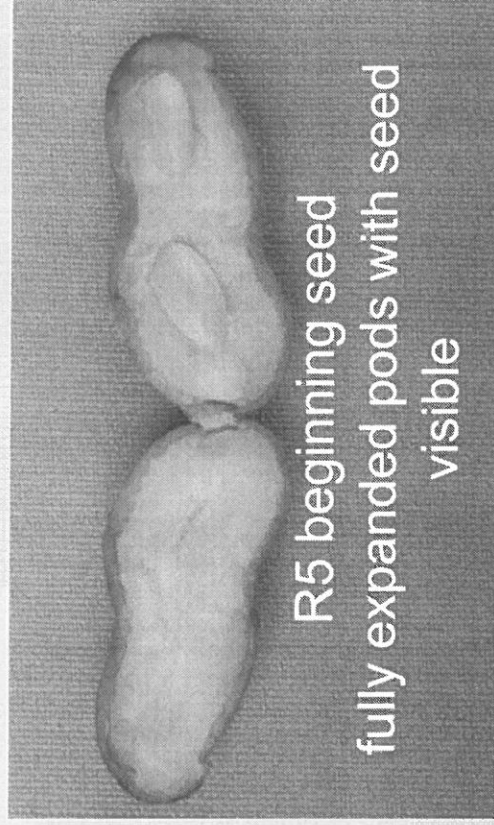
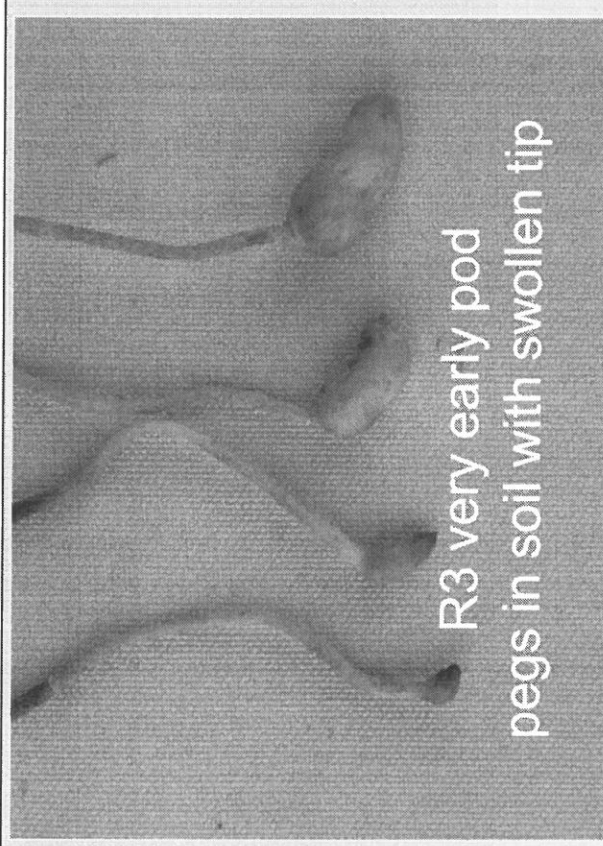
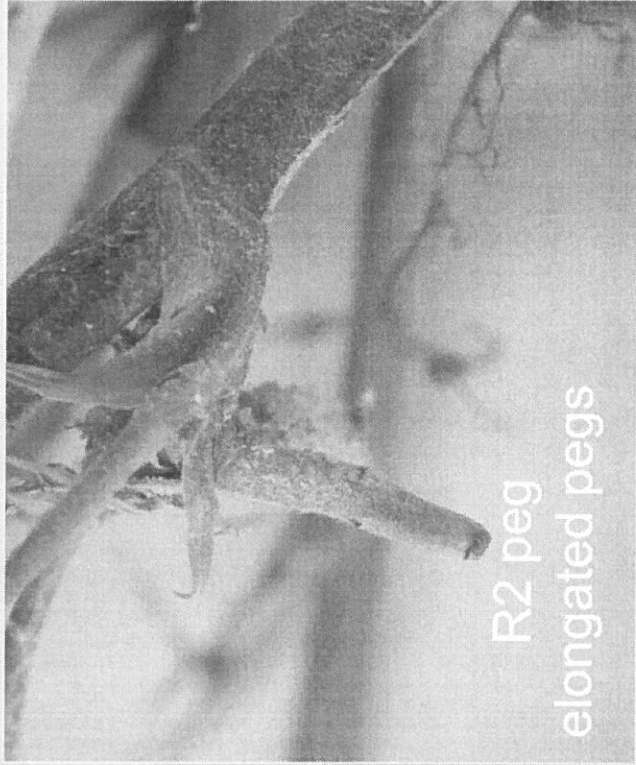
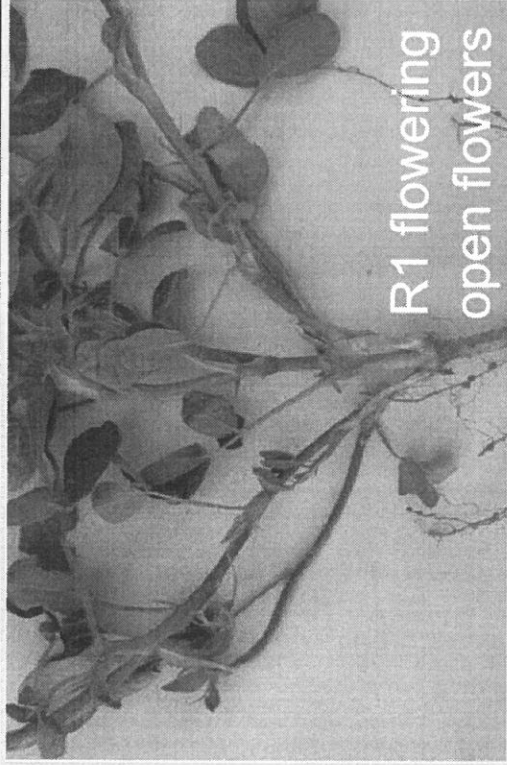
To enhance leaf spot control by any group 3, 7, or 11 fungicide (or premix of these), mix with:

Bravo 1 pt/A (most formulations; check label).

Mix Bravo with any product that has underperformed in previous years at your location

# Peanut reproductive stages

Begin leaf spot sprays no later than R3 (around 50 DAP)



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## Peanut Leaf spot advisories

The North Carolina peanut leaf spot advisory is a cooperative effort by the State Climate Office of North Carolina and the Department of Entomology and Plant Pathology at NC State University. The advisory is a safe way to minimize fungicide applications by spraying only when weather conditions favor disease.

```
July 10, 2020 PEANUT LEAF SPOT ADVISORY FOR ROCK
Upper Coastal Plain Res Stn (Rocky Mount, NC)
setDate = 2020-07-06 07:00:00
lethal conditions = false
favorable hours = 59
LESD = 2020-06-26
ROCK Advisory: spray today
Growing degree days (base 56) since LESD = 354.2
Growing degree days (base 56) since May 1 = 1111
Records count: 96 out of 97
Most recent db ob to 8am EDT: 2020-07-10 07:00:00
```

In well-rotated fields, **the first fungicide spray should be applied by the very early pod stage (R3), but no later than July 10.** After the first spray, apply fungicides according to the leaf spot advisory.

**Each day's advisory: "spray today" or "do not spray today" can be found on the 7<sup>th</sup> line** for each location. A spray should be applied if it has been 14 days since the last spray.

### Advisory information:

**lines 1 & 2 – Date, name location of station.** ECONET stations are indicated by an abbreviated name; airport stations are indicated by call letters. Check advisories the two stations nearest you.

**line 3 – Set date.** This is used to calculate the advisory.

**line 4 – Lethal conditions.** A temperature of 99°F or higher for 5 straight hours OR humidity less than 40% for 8 straight hours will kill the pathogen. If lethal conditions = true, favorable hours (below) are reset to 0.

**line 5 - Favorable hours.** An hour is favorable for leaf spot development when the humidity is at least 95% and temperature is between 61°F and 90°F during that hour. A spray is advised when there have been at least 48 favorable hours since the set date.

**line 6 – LESD (Last Effective Spray Date).** A fungicide spray is assumed to protect for 14 days. **You do not need to spray if you have sprayed since the LESD even when the advisory says "spray today."**

Example: LESD = 2020-06-26 means you need to spray today if your last spray was applied **before** June 26.

**line 7 – Today's advisory.** If the advisory is **"spray today"** conditions are favorable for leaf spot and you should spray if no fungicide has been applied in the past 14 days. If the advisory is "do not spray today" a spray is not required.

**lines 8 & 9 - Growing degree days** for peanuts (base 56) since the LESD and since May 1.

**line 10 – Records count.** The number of hourly weather observations out of the total possible observations. **The advisory may not be reliable if there are several missing records.**

**line 11 – Most recent hourly observation.** This should be 7:00:00 (7 a.m.) on the date of the advisory.