

**Situation 1:
 Bailey, long rotation, minimal stem rot
 4 spray program**

Apply the first spray at R3 (very early pod) or R3 + 2 weeks on Bailey. Well rotated peanuts need a total 5 sprays (4 sprays for Bailey) applied at 2 week intervals in most seasons. The number of sprays required can be reduced by using the peanut leaf spot advisory after the first spray.

Spray 1 (R3)	Sprays 2 & 4	Spray 3	Spray 5	Remarks
None	Abound 12.7 -18 oz OR Headline 6 -15 oz Group 11	Chlorothalonil** Group M	Chlorothalonil** Group M	•Excellent leaf spot control; stem rot control depends on rate of Abound or Headline (higher rates will give more control) ** Full season use of chlorothalonil can increase spider mite problems in dry years
<p>Sample program 1 is most appropriate when leaf spot control is a greater consideration than control of soil borne diseases. Assumes: *Field rotated for more than 3 years to a non-susceptible crop (soybean, tobacco, vegetables, melons) with no history of soil borne diseases, Bailey, non-irrigated</p>				

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**Situation 2 (most fields):
 Bailey, stem rot and/or CBR possible
 4 spray program**

Apply the first spray at R3 (very early pod) or R3 + 2 weeks on Bailey. Well rotated peanuts need a total 5 sprays (4 sprays for Bailey) applied at 2 week intervals in most seasons. The number of sprays required can be reduced by using the peanut leaf spot advisory after the first spray.

Spray 1 (R3)	Spray 2, 3, OR 4 (1 application during this period)	Sprays 2, 3 and 4 (2 applications during this period)		Spray 5	Remarks
		option 1 (leaf spot + stem rot control)	option 2 (leaf spot only)		
None	Provost 8 to 10 oz (Group 3)	Abound 12.7 -18 oz OR Headline 6 -15 oz	Chlorothalonil **	Chlorothalonil **	<ul style="list-style-type: none"> •Very good leaf spot control; very good stem rot control •Option 1 may enhance stem rot control; higher rates will give more control **Full season use of chlorothalonil could increase spider mite and/or Sclerotinia problems
	Tebuconazole 7.2 oz (Group 3) + 1 pt. Chlorothalonil**				
	Artisan 16 oz (Group 7 + Group 3) + 1.5 pt Chlorothalonil **	Group 11	Group M	Group M	
	Convoy 13 oz (Group 7) + 1.5 pt. Chlorothalonil**				
	Fontelis 16 oz (Group 7)				

Sample program 2 is most appropriate when Bailey has been planted and soilborne diseases (stem rot, CBR, Rhizoctonia limb rot, or pod rot) may be present (most fields). Use if any of these apply: *Fields with a known history of these diseases *Fields with less than four years between peanut crops *Fields rotated with susceptible crops (soybeans, tobacco, tomatoes, melons, and many other vegetables) *Irrigated or wet fields *Fields where rank vine growth can be expected. **Mid-July to mid-August is the critical period for stem rot control**

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Situation 3:
 Susceptible cultivar, excellent rotation, minimal stem rot
 5 spray program

Apply the first spray at R3 (very early pod) or R3 + 2 weeks on Bailey. Well rotated peanuts need a total 5 sprays (4 sprays for Bailey) applied at 2 week intervals in most seasons. The number of sprays required can be reduced by using the peanut leaf spot advisory after the first spray.

Spray 1 (R3)	Sprays 2 & 4	Spray 3 option 1 (leaf spot only)	Spray 3 option 2 (leaf spot + stem rot) (pick one)	Spray 5	Remarks
Propiconazole + Chlorothalonil ** Group 3 + Group M	Abound 12.7 -18 oz OR Headline 6 -15 oz Group 11	Chlorothalonil** Group M	Provost 8 to 10 oz (Group 3)	Chlorothalonil** Group M	<ul style="list-style-type: none"> •Excellent leaf spot control; stem rot control depends on rate of Abound or Headline (higher rates will give more control) •Use option 2 for the 3rd spray to enhance stem rot control ** Full season use of chlorothalonil can increase spider mite problems in dry years
			Tebuconazole 7.2 oz (Group 3) + 1 pt. Chlorothalonil**		
			Artisan 16 oz (Group 7 + Group 3) + 1.5 pt Chlorothalonil**		
			Convoy 13 oz (Group 7) + 1.5 pt. Chlorothalonil**		
			Fontelis 16 oz (Group 7)		

Sample program 3 is most appropriate when leaf spot control is a greater consideration than control of soil borne diseases. Assumes:
 *New fields or fields rotated for more than 4 years to a non-susceptible crop (soybean, tobacco, vegetables, melons), *no history of soil borne diseases, *Non-irrigated

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Situation 4:
Susceptible cultivar, stem rot and/or CBR a concern
5 spray program

Apply the first spray at R3 (very early pod) or R3 + 2 weeks on Bailey. Well rotated peanuts need a total 5 sprays (4 sprays for Bailey) applied at 2 week intervals in most seasons. The number of sprays required can be reduced by using the peanut leaf spot advisory after the first spray.

Spray 1 (R3)	2nd and 4th spray	3rd spray option 1 (leaf spot only)	3rd spray option 2 (leaf spot + stem rot)	Remarks
Propiconazole + Chlorothalonil** Group 3 + Group M	Provost 8 to 10 oz (Group 3)	Chlorothalonil** Group M	About 12.7 -18 oz OR Headline 6 - 15 oz (Group 11)	•Very good leaf spot control; very good stem rot control. •Use option 2 for the 3 rd spray to enhance leaf spot and stem rot control **Full season use of chlorothalonil with this option could increase spider mite and/or Sclerotinia problems
	Tebuconazole 7.2 oz (Group 3) + 1 pt Chlorothalonil**			
	Artisan 16 oz (Group 7 + Group 3) + 1.5 pt Chlorothalonil**			
	Convoy 13 oz (Group 7) + 1.5 pt. Chlorothalonil**			
	Fontelis 16 oz (Group 7)			

Sample program 4 is most appropriate when soilborne diseases (stem rot, CBR, Rhizoctonia limb rot, or pod rot) are a concern.
 Examples include: *Fields planted to a susceptible variety *Fields with a known history of these diseases *Fields with less than four years between peanut crops *Fields rotated with susceptible crops (soybeans, tobacco, tomatoes, melons, and many other vegetables)
 *Irrigated or wet fields *Fields where rank vine growth can be expected
Mid-July to mid-August is the critical period for stem rot control

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**Situation 5:
 Bailey, history of Sclerotinia blight
 4 spray program**

Apply the first spray at R3 (very early pod) or R3 + 2 weeks on Bailey. Well rotated peanuts need a total 5 sprays (4 sprays for Bailey) applied at 2 week intervals in most seasons. The number of sprays required can be reduced by using the peanut leaf spot advisory after the first spray.

Spray 1 (R3)	Spray 2	Spray 3	Spray 4	Spray 5	Remarks
None	Select from this line:			Chlorothalonil Group M	<ul style="list-style-type: none"> •Very good leaf spot control; very good stem rot control •This program is for leaf spot and stem rot control only. The 16 oz rate of Fontelis may give some suppression of Sclerotinia at best. It does not eliminate the need for additional Sclerotinia sprays in fields with a strong history of disease and/or heavy disease pressure.
	Provost 8 to 10 oz (Group 3)	About 12.7 -18 oz (Group 11) OR Headline 6 - 15 oz (Group 11) OR Fontelis 16 oz (Group 7)	Provost 8 to 10 oz (Group 3) OR Fontelis 16 oz (Group 7)		
	OR Select from this line:				
	About 12.7 -18 oz (Group 11) OR Headline 6 - 15 oz (Group 11)	Provost 8 to 10 oz (Group 3) OR Fontelis 16 oz (Group 7)	About 12.7 -18 oz (Group 11) OR Headline 6 - 15 oz (Group 11) OR Fontelis 16 oz (Group 7)		

Sample program 5 minimizes applications of chlorothalonil and is appropriate when Sclerotinia blight is a concern. This program assumes that Bailey will be planted when Sclerotinia is a threat. Mid-July to mid-August is the critical period for stem rot control; scout and follow advisories to determine when Sclerotinia is active.

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Peanut fungicide comments 2014

- Apply the first spray at R3 (very early pod) or R3 + 2 weeks on Bailey. Well rotated peanuts need a total 5 sprays (4 sprays for Bailey) applied at 2 week intervals in most seasons. The number of sprays required can be reduced by using the peanut leaf spot advisory after the first spray.
- The right program for a particular field depends on the cultivar, irrigation, and the field's disease and cropping history. Fields on short rotations (less than three years between peanut crops) and irrigated fields are at higher risk for soilborne diseases. Rotational crops that increase risk of soilborne diseases include soybeans, tobacco, tomatoes, melons, and many other vegetables. Remember that diseases caused by peanut pathogens can have different names in other crops. For example: stem rot = white mold, Southern blight; Rhizoctonia = sore-shin, belly rot, damping off; CBR = red crown rot.
- The major fungicides on the market all perform well. In my opinion, overall differences in the most widely products in groups 3, 7, 11 are not great enough to justify agonizing over fungicide choices.
- However, no fungicide is perfect. All have relative strengths and weaknesses. Fungicides from different groups (3, 7, 11) tend to be complementary in their activity.
- A fungicide program that alternates different groups fungicides takes advantage of the strengths of different groups (3, 7, 11) and also helps to reduce the risk of fungicide resistance.
- Group 7 fungicides tend to be effective against stem rot and provide additional options for fungicide resistance management in an overall spray program.
- Use a multisite (group M) fungicide to prevent resistance to any group. Be aware that group M fungicides only control foliar diseases when used alone.
- Repeated applications of the group M fungicide chlorothalonil (Bravo) can flare spider mites and make Sclerotinia blight worse. Switch to a different fungicide during hot, dry periods. Minimize applications of all fungicides during these periods by using leaf spot advisories. Avoid repeated applications of chlorothalonil in fields with a history of Sclerotinia blight.
- The programs listed are adaptable to an advisory program.
- The products listed are the ones most commonly used in our area. Not all labeled products are listed for sake of brevity and simplicity. Please check the [North Carolina Agricultural Chemicals Manual](#) for a complete listing of fungicides registered on peanuts in North Carolina

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Comparison of commonly used peanut fungicides 2014

Fungicide	group	Leaf spots	Stem rot/ Limb rot	Strengths	Limitations
Abound (azoxystrobin) 12 – 18 oz	11	✓	✓	<ul style="list-style-type: none"> •Very good leaf spot and web blotch control •Good stem rot control •Excellent Rhizoctonia limb and pod rot control 	<ul style="list-style-type: none"> •Less effective against established stem rot infections •Rain or irrigation is needed to optimize benefits of high rates (18 oz) for stem rot control •No more than 2 applications per year due to resistance risk
Bravo (chlorothalonil) 1.5 pt (or generic)	M	✓		<ul style="list-style-type: none"> •Low cost •Resistance management •Very good leaf spot control 	<ul style="list-style-type: none"> •No control of soil borne pathogens •Full season use can flare spider mites and make Sclerotinia blight worse •Non-systemic with no curative action
Convoy (flutolonil) 13 oz	7		✓	<ul style="list-style-type: none"> •Very good – excellent stem rot control •Useful for resistance management 	<ul style="list-style-type: none"> •NO leaf spot control. MUST be mixed with a leaf spot fungicide.
Artisan (flutolonil + propiconazole) 16 oz	7 + 3		✓	<ul style="list-style-type: none"> •Very good – excellent stem rot control •Useful for resistance management 	<ul style="list-style-type: none"> •Mix with a leaf spot fungicide
Fontelis (penthiopyrad) 16 oz	7	✓	✓	<ul style="list-style-type: none"> •Very good stem rot control •Useful for resistance management •Some suppression of Sclerotinia blight at high rates (>16 oz) 	<ul style="list-style-type: none"> •Appears to be slightly less effective against leaf spot than industry standards •No more than 2 applications per year due to resistance risk

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Comparison of commonly used peanut fungicides 2014 (cont)

Fungicide	group	Leaf spots	Stem rot/ Limb rot	Strengths	Limitations
Headline (pyraclostrobin) 6 – 15 oz	11	✓	✓	<ul style="list-style-type: none"> •Long residual and wash–off resistance •Excellent leaf spot and web blotch control •Fair – good stem rot control •Some curative action 	<ul style="list-style-type: none"> •High rates are needed for stem rot control and stem rot control can be erratic •No more than 2 applications per year due to resistance risk
Provost (tebuconazole + prothioconazole) 8 – 10 oz	3	✓	✓	<ul style="list-style-type: none"> •Very good – excellent stem rot, limb rot and pod rot control •CBR suppression •Very good leaf spot control 	<ul style="list-style-type: none"> •Resistance risk. Alternate with other chemistry to prevent loss of effectiveness
Tebuconazole 7.2 oz (generic)	3	✓	✓	<ul style="list-style-type: none"> •Very good – excellent stem rot, limb rot and pod rot control •Poor - good leaf spot control •Low cost of generics 	<ul style="list-style-type: none"> •Erratic leaf spot control due to fungicide resistance in some locations; not effective against late leaf spot due to resistance •Always mix with .75 to 1 pt Bravo
Tilt Bravo (propiconazole + chlorothalonil) 1.5 pt (or generic)	3 + M	✓		<ul style="list-style-type: none"> •Low cost •Resistance management •Limited curative action •Very good leaf spot control 	<ul style="list-style-type: none"> •No control of soilborne pathogens •Full season use can flare spider mites and make Sclerotinia blight worse

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