

<b>Onion Disease Risk Assessment</b> Fungal Disease Forecasts (Purple Blotch, Downy Mildew and Botrytis Neck Rot) (update on a weekly basis)				<b>YOUR SCORE</b>
Total Rainfall (inches), summarize cumulative rainfall weekly up to Late Vegetative Growth Stage				
Less than 0.1" [ 1 ]	0.1 - 0.5" [ 2 ]	0.5 - 1.0" [ 3 ]	More than 1" [ 4 ]	
Daily High Temperature (F), summarize weekly up to Late Vegetative Growth Stage				
Less than 76 F [ 1 ]	76 - 81 F [ 2 ]	81 - 86 F [ 3 ]	More than 86 F [ 4 ]	
Forecasted Total Rainfall (inches), weekly between Late Vegetative and Late Bulbing Growth Stages				
Less than 0.1" [ 1 ]	0.1 - 0.5" [ 2 ]	0.5 - 1.0" [ 3 ]	More than 1" [ 4 ]	
Forecasted Daily High Temperature (F), weekly between Late Vegetative and Late Bulbing Growth Stages				
Less than 76 F [ 1 ]	76 - 81 F [ 2 ]	81 - 86 F [ 3 ]	More than 86 F [ 4 ]	
Forecasted Average Wind Speed (mph), weekly between Late Vegetative and Late Bulbing Growth Stages				
Less than 1 mph [ 1 ]	1 - 5 mph [ 2 ]	5 - 10 mph [ 3 ]	More than 10 mph [ 4 ]	
Onion Rotation of less than 3 years, and/or initial fungal infection (disease) confirmed in field or nearby				
	No onions (3 yr), No Disease [ 1 ]	Recent onions OR Disease Nearby [ 2 ]	Recent onions & Disease Nearby [ 4 ]	
Yield Potential Estimate - in relation to plant population, fertility, irrigation, weeds, growing season				
	Low [ 1 ]	Moderate [ 2 ]	High [ 4 ]	
Irrigation Practice/Schedule between Bulbing Growth Stage to Dry Down (pre-harvest)				
	Drip-line System [ 1 ]	Furrow or Gated Pipe [ 2 ]	Sprinkler or Center Pivot [ 4 ]	
Varietal Reaction to the Fungal (foliar, storage rot) Disease Threat				
	Resistant [ 1 ]	Unknown [ 2 ]	Susceptible [ 4 ]	
<b>Onion Disease Risk - TOTAL SCORE:</b>				

**SUMMARY** - If your Total Score was:

- more than 25 = High Risk
- 20 - 25 = Moderate Risk
- less than 20 = Reduced Risk

If the susceptible variety is planted in a field or region with a history of fungal disease(s) and the total score was 20 or higher (moderate to high risk), treatment with a labeled fungicide (adjuvant, adequate gallonage, good coverage) as a protectant should be considered during the late vegetative (2 to 3 weeks pre-bulbing) to the late bulbing (cropping or dry down) growth stages. Follow a 5 to 10 day interval between sprays, depending upon disease pressure and forecasted weather conditions. Pesticide Information available at: <http://www.highplainsipm.org/>

[ Strategy adapted for Colorado and surrounding region by Drs. H. F. Schwartz & D. H. Gent, M. S. McMillan, and K. L. Otto - 2008 ]

**Onion IPM Tactics:**

- Rotate to exclude susceptible hosts (i.e., onion volunteers, weeds) for 3 + years; examples of non-host crops include small grains and corn
- avoid planting in fields with a history of disease during the last 3 years or near cull piles
- plant resistant or less susceptible varieties if available
- follow recommended plant population - row & plant spacing
- soil test and use a moderate fertility program, do not apply nitrogen post-bulb as this can aggravate disease losses
- incorporate fall and/or spring tillage to eliminate carryover debris, cull piles and volunteer onions (bulbs) in last

year's onion fields, promote root health and moisture drainage, good air flow between onion lines and rows in this year's onion fields

- monitor irrigation scheduling to avoid splashing and canopy saturation during prolonged periods
- utilize timely scouting, disease forecasting, and weather monitoring services
- when justified, use timely applications of recommended bactericides at late vegetative growth, maintain protection throughout bulbing until cropping and dry down
- cure onion tops well in the field, and keep bulbs dry and cool in storage