

<b>Onion Disease Risk Assessment</b> Thrips & <i>Iris yellow spot virus</i> (IYSV) Forecast (update on a weekly basis)				<b>YOUR SCORE</b>
<b>Total Rainfall (inches), summarize cumulative rainfall weekly up to Late Vegetative Growth Stage</b>				
Less than 0.1" [ 4 ]	0.1 - 0.5" [ 3 ]	0.5 - 1.0" [ 2 ]	More than 1" [ 1 ]	
<b>Daily High Temperature (F), summarize weekly up to Late Vegetative Growth Stage</b>				
Less than 76 F [ 1 ]	76 - 81 F [ 2 ]	81 - 86 F [ 3 ]	More than 86 F [ 4 ]	
<b>Forecasted Total Rainfall (inches), weekly between Late Vegetative and Late Bulbing Growth Stages</b>				
Less than 0.1" [ 4 ]	0.1 - 0.5" [ 3 ]	0.5 - 1.0" [ 2 ]	More than 1" [ 1 ]	
<b>Forecasted Daily High Temperature (F), weekly between Late Vegetative and Late Bulbing Growth Stages</b>				
Less than 76 F [ 1 ]	76 - 81 F [ 2 ]	81 - 86 F [ 3 ]	More than 86 F [ 4 ]	
<b>Forecasted Average Wind Speed (mph), weekly between Late Vegetative and Late Bulbing Growth Stages</b>				
Less than 1 mph [ 1 ]	1 - 5 mph [ 2 ]	5 - 10 mph [ 3 ]	More than 10 mph [ 4 ]	
<b>Moderate to high thrips infestations and/or trace IYSV infection confirmed in field or nearby</b>				
	Low Thrips and No Disease Near [ 1 ]	Mod. Thrips OR trace Disease Near [ 2 ]	Mod. Thrips & trace Disease Near [ 4 ]	
<b>In - Field thrips infestation (count weekly from 3 weeks prebulb to 3 weeks postbulb)</b>				
5 or fewer / plant [ 1 ]	6 - 15 / plant [ 2 ]	16 - 25 / plant [ 3 ]	26 or more / plant [ 4 ]	
<b>Yield Potential Estimate - in relation to plant population, fertility, irrigation, weeds, growing season</b>				
	Low [ 4 ]	Moderate [ 2 ]	High [ 1 ]	
<b>Irrigation Practice or System</b>				
	Drip-line System [ 1 ]	Sprinkler [ 2 ]	Furrow or Pipe [ 4 ]	
<b>Varietal Reaction to Thrips and/or the Iris yellow spot virus Disease Threat</b>				
	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 thrips and IYSV disease(s) or near onion culls and the total score was 20 or higher (moderate to high risk), treatment with a labeled insecticide (conventional, biopesticide) and plant protectant (e.g., Actigard - check state labels for Section 18 use, rate and interval) should be considered during the mid vegetative to mid bulbing growth stages. Follow a 7 to 14 day interval between sprays, depending upon thrips pressure and forecasted weather conditions, and rotate pesticide classes and chemistry. 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