

Fungicide Decision Worksheet for Managing White Mould in Dry Bean

Complete this worksheet for your dry bean field(s) at the V-4 stage or one to two weeks prior to fungicide timing to assess the risk of white mould infection. The risk score along with yield potential and crop value can be used to aid in the decision of whether or not a fungicide application is required.

Adapted from University of Nebraska-Lincoln Extension (H. Schwartz)

			YOUR SCORE
Weekly total rainfall pre-flowering (weekly average up to V-4)	< 0.1"	1	
	0.1–0.5"	2	
	0.5–1.0"	3	
	> 1.0"	4	
Average daily high temperature pre-flowering (weekly average up to V-4)	< 18°C	4	
	18–21°C	3	
	22–28°C	2	
	> 28°C	1	
Humidity (%) or hours of dew or free water on foliage (weekly average)	0–25% (< 6 hrs)	1	
	26–50% (< 12 hrs)	2	
	51–75% (< 18 hrs)	3	
	>75% (< 24 hrs)	4	
Forecasted/actual rainfall expected during flowering (weekly average between V-4 and R-4 stages)	< 0.1"	1	
	0.1–0.5"	2	
	0.5–1.0"	3	
	> 1.0"	4	
Forecasted/actual daily high temperature during flowering (weekly average between V-4 and R-4 stages)	< 18°C	4	
	18–21°C	3	
	22–28°C	2	
	> 28°C	1	
Dry bean crop rotation and/or other susceptible hosts included in rotation (ex. canola)	≥ 3 years	1	
	< 3 years	2	
Susceptible hosts and/or fungal apothecia observed nearby (less than 2 km) before flowering (R-1)	No hosts, No Apothecia nearby	1	
	Hosts OR Apothecia nearby	2	
	Hosts AND Apothecia nearby	4	
Timing and amount of nitrogen fertilizer applied	Planting < 100 lbs/ac	1	
	Planting > 100 lbs/ac	2	
	Split application	3	
Plant spacing, effects on canopy density, and microclimatic conditions favouring white mould	Wide rows, low–moderate density	1	
	Wide rows, moderate–high density	2	
	Narrow rows, moderate density	3	
	Narrow rows, high density	4	
Varietal reaction (based on upright growth habit and/or genetic resistance) to white mould	Resistant	1	
	Unknown	2	
	Susceptible	4	
Dry Bean Disease Risk — Total Score:			
> 30 = High Risk 20–30 = Moderate Risk < 20 = Reduced Risk			