

HERBICIDE RAINFAST TIMES

Author's note—This chart was originally produced by Joe Yenish, PhD. This author acknowledges and thanks him for his contributions to the current chart.

Rainfastness refers to the necessary length of a rain-free period following a herbicide application. If a rain shower occurs during the rainfast period defined on the label, reduced effectiveness or possible crop injury could occur. The actual reduced effectiveness will vary with the herbicide product, species targeted, and environmental conditions. The rainfast periods for herbicides labeled for use in Washington is shown in the following table. Herbicides listed include products labeled in cereals and other commodities.

Few if any herbicide labels suggest what to do if rainfall does occur within the rainfast period. Additionally, most labels provide equal weight regardless of whether the precipitation is a light mist or a heavy thunderstorm. Herbicide labels provide information on how to make a legal application, and not following the label may result in a fine or other legal action. However, the label also serves as a product warranty. Thus, if any rainfall does occur within the rainfast period, the herbicide manufacturer is not obligated to compensate for lost yields or the cost of a re-application of the herbicide. Although crop injury due to a sudden rain shower following an application is unlikely, the manufacturer would also not be obligated to compensate for yield loss due to crop injury.

The options following a rain shower during the rainfast period are unclear. The main problem is that the effective dose of the herbicide may have been reduced due to rain washing the herbicide off of the foliage. However, it is impossible to determine the resulting dose and whether a re-application is necessary. Moreover, some herbicide mode of actions are such that it may take several days to more than a week to determine if control has been reduced. **Generally, if weed injury symptoms are not apparent after five to seven days, it will likely require a re-application of the herbicide, depending on the product.**

Some herbicide labels limit particular products to one application per year. In those cases the answer is simple—you can't reapply that herbicide. In other cases, it may be a good idea to wait a week or so to re-apply the same or an alternative herbicide. Re-applying a herbicide with the same or a similar active ingredient sooner than seven days after the initial application could result in excessive crop injury. Also, if an alternative herbicide is used within seven days of the initial application there is potential for reduced activity of the original herbicide or a tank mix partner. Typically, the decision to re-apply is driven by weed size. Often, larger weeds or more advanced crop growth require changing the selected product.

In addition to rainfall, other weather events around the time of application could reduce herbicide efficacy, increase

crop injury, or potential off-site movement. High relative humidity on or around the time of application often increases weed control, increases crop injury, or increases drift. Alternatively, dry conditions may reduce weed control and potential crop injury. Obviously, all weather conditions at or around the time of application will impact the effectiveness of the application.

In summary, it is best to be aware of weather forecasts and completely avoid herbicide applications when rain threatens. Should rainfall occur during the rainfast period, the considerations for follow-up strategies will differ with the specific herbicide.

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HOURS UNTIL RAINFAST

		1	2	3	4	5	6	7	8
Affinity Tankmix, Broadspec	not specified; label states several hours of dry weather are needed for absorption								
Aim (carfentrazone)									6 to 8
Ally					4				
Amber					4				
Assert				3					
Assure II, Targa		1							
Axial XL		.5							
Axial Star		1							
Axiom	no restrictions								
Beyond		1							
Bronate Advanced	no restrictions								
Buctril	no restrictions								
Clarity/Banvel					4				
Curtail, Curtail M							6		
Discover NG		.5							
Express	not specified; label states several hours of dry weather are needed for absorption								
Everest 2.0		1							
Finesse Cereal + Fallow							6		
Glean XP	not specified; label states postemergence weed control will be reduced if rainfall occurs soon after application								
GoldSky					4				
Gramoxone SL 2.0		.25-.5							
Harmony SG, Extra SG	not specified; label states several hours of dry weather are needed for absorption								
Huskie		1							
Karmex DF	not specified; excessive rain following application may result in crop injury								
Linex	not specified								
MCPA amine	not specified								
MCPA ester	not specified								
Metri, Metribuzin	not specified; excessive rain following application may result in crop injury								
Olympus					4				
Orion					4				
Osprey					4				
Outrider			2						
Paramount							6		
Peak					4				
Powerflex					4				
Prowl	no restrictions								
Puma		1							
Roundup (all glyphosates)	not specified to 6 hours; heavy rainfall soon after application may wash product off foliage and require repeat application								
Starane Flex				4					
Starane NXT, Ultra, +Sabre, +Salvo, +Sword		1							
Vida		1							
Weedmaster				4					
WideMatch							6		
2,4-D amine	not specified								
2,4-D ester	not specified								

