

JUNE 7 VEGNET REPORT CANADA THISTLE MANAGEMENT IN PASTURES AND NON-CROP AREAS RUSSIAN KNAPWEED MANAGEMENT ON RANGELAND AND NON-CROP AREAS

JUNE 7 VEGNET REPORT

During the last week, temperatures averaged mid 70s to low 80s at most sites in the region. During the last week, rainfall was less than 0.25 inches on the average in western Kansas, western Colorado and the Front Range, while northeastern Colorado received 0.40 to 0.84 inches. Sites in Nebraska and Wyoming received 0.32 to 1.11 inches of rain. The upcoming week is forecasted at average moisture and above average temperature at most sites for this time of the year.

Continue with the aggressive sanitation of diseased volunteer plants by mechanical cultivation, plowing to destroy and bury diseased debris and volunteers, or application of pesticides, which eliminate volunteer plants (as weeds). After working in any field, be sure and clean plant debris and soil from all implements and yourself to reduce cross contamination of the next field.

Crops should be scouted at least once a week for early evidence of pests. Check with your local consultants and other experts on crop status and the initiation of disease protection strategies when disease is confirmed in the region and a threat does exist.

DRY BEAN Pests:

As of June 7, the dry bean crop is beginning to emerge in most of the region and there are no reports of problems. Be on the lookout for seedling problems related to the earlier cool, wet conditions, which may aggravate damage from herbicides, root rots, or soil-borne insects like maggots or wireworms. Beans prefer soil temperatures above 60 F at and after planting to favor rapid germination and emergence, thereby avoiding many of these stress-related problems.

At this point, there is no need for foliar fungicide or bactericide applications to the dry bean crop.

ONION Pests:

As of June 7, most transplanted fields are progressing nicely and show few effects of soil-line Botrytis infection, unless plants were stressed by planting (small and poor quality plants, shallow placement, bruising of plant tissue) and post-planting (cold and wet) conditions. If new Botrytis

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lesions are occurring at the soil line, consider a directed spray of a specific fungicide like Rovral or Botran in more than 25 gallons of water per acre to drench the soil-plant interface where the Botrytis is active and before the fungus penetrates too deeply into the bulb (more than 3 scales deep. Manage irrigation applications to reduce the time that the onion bulbs and soil-line interface remain saturated; these cool, wet conditions promote Botrytis development.

At this point, there is no need for foliar fungicide or bactericide applications to the seeded onion crop.

POTATO Pests:

At this point, there is no evidence of any foliar disease threat that would require fungicide applications in this region. The Late Blight disease model ranges from 3 to 16 for northeastern Colorado, assuming a May 1 emergence date with hours greater than 80 % relative humidity. The Early Blight model values vary from 198 to 215 (threshold is 300).

At this point, there is no need for foliar fungicide applications to the potato crop. As the crop canopy nears closure, consider an early preventive program for Early Blight. (Schwartz)

CANADA THISTLE MANAGEMENT IN PASTURES AND NON-CROP AREAS

Canada thistle is ready to be managed. Be sure to integrate control methods into a management system and always consider seeding the infestation with perennial grasses in fall as a final management step. It is usually best to exert control measures for two consecutive years then seed perennial grasses in the fall. Also, a good grass population may accompany Canada thistle infestations and reseeding may not be necessary. Carefully examine the grass population to determine if reseeding is required.

Two biocontrol insects are available to *help* manage Canada thistle. *Ceutorhyncus litura*, attacks Canada thistle rosettes and a seed head fly, *Urophora cardui*, lays eggs in flowers causing the formation of huge galls and reducing seed set. These are available from the Colorado Department of Agriculture.

Tordon at 1 qt/A or Tordon + 2,4-D at 1 qt + 1 qt/A are very effective herbicides to control Canada thistle and can be applied anytime during the growing season. Other effective herbicide treatments include Banvel at 2 qt/A applied in spring to rosettes or in fall; Telar at 1 oz/A (non-crop only) applied in prebloom to bloom growth stages; and Transline (non-crop only) at 0.67 to 1 pt/A or Curtail at 2 to 3 qt/A applied in spring after all Canada thistle has emerged. CSU research has shown a dramatic increase in control from Curtail applications if they were applied in fall and preceded by two or three mowings per season. For additional information, call George Beck at (970) 491-7568 or see CSU SIA 3.108. (Beck)

RUSSIAN KNAPWEED MANAGEMENT ON RANGELAND AND NON-CROP AREAS

Russian knapweed is a noxious, perennial weed and a planned, integrated management approach will achieve the best control. Management systems must rely on chemical or mechanical methods coupled with competition from desirable plants. Biocontrol of Russian knapweed is not available currently. Russian knapweed is allelopathic and may reduce or eliminate desirable plants in weed infestations. It is essential that infested areas be seeded to perennial grasses after the weed is adequately controlled. Tordon at 1 qt/A, Tordon plus 2,4-D at 1-1.5 pt + 1 qt/A, Curtail at 3 qt/A, or Escort at 1 oz/A can be used in pastures, rangeland, or non-crop areas. Telar at 1 oz/A can be used in non-crop areas only. Apply Tordon or Tordon plus 2,4-D anytime Russian knapweed is growing or Curtail in spring when the weed is in the bud to bloom growth stage. Apply Escort or Telar when Russian knapweed is in the bloom to post-bloom growth stage, although fall applications of Telar have been very successful. Escort or Curtail may be applied in spring before perennial grasses are sown in fall, but Tordon may be applied only on established grasses. Recent CSU research showed that two mowings (June and August) followed by fall sown grasses was less successful than Curtail or Escort applied in spring followed by fall sown grasses. The best treatment combination in this research was Curtail applied at 3 qt/A when Russian knapweed was in the bud to bloom growth stage followed by seeding streambank wheatgrass. Over 93% of Russian knapweed still was controlled 2 years after the treatment combination was done and there was 27 times more streambank wheatgrass harvested from plots treated with Curtail than from those where mowing was used as a suppression treatment or where no suppression was done. For additional information, call George Beck at (970) 491-7568 or refer to CSU SIA 3.111. (Beck)

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Sincerely,

William M. Brown, for William M. Brown, Jr. Extension Plant Pathologist