

Flea Beetle Pressures HEAVY in Canola NC-NE Regions ND

Due to this hot weather, flea beetles are emerging in large numbers and moving quickly into canola fields. Check fields for signs of pitting in the leaves. The economic threshold for treatment is 25% in the seedling stage. However, many fields are already above the 25% defoliation level due to the heavy pressures. Numerous fields from the NC and NE Regions of North Dakota are being sprayed with Capture this week.

Field monitoring for flea beetle activity should begin in newly emerged canola fields. Assess the canola field for presence of flea beetles and their feeding damage or pitting for the first 14 days after crop emergence, or until plants have reached the 4-leaf stage. Fields should be checked daily to identify damage as it develops and to make timely management decision.

The amount of defoliation should be used as a guide to determine the need for management action. Injury often occurs first at the field edges, particularly where a shelterbelt/grassy area borders a field. To

determine the extent and distribution of damage, start at the field margins and walk into the field, selecting plants at various random intervals. Estimate percent defoliation for each plant selected. **The economic threshold for a foliar application is when an average of 25% of the surface**

area of cotyledons and first true leaves have been injured and beetles are present. If leaf damage is less than 25% and the crop is actively growing, the crop can usually recover. Watch fields closely in hot, dry weather, when flea beetle populations can rapidly increase.

Fields that have been planted with a seed treatment should still be scouted during the first two weeks after canola emergence. If the seed was in the ground for a long time prior to emerging,

protection from the insecticide seed treatments could be reduced. Fields that are planted to seed treatments only on field edges should be scouted as well. The beetles readily fly when temperatures exceed 64°F and will move quickly into the field's interior. Beetles are most active during sunny, warm, calm and dry weather conditions.

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Sclerotinia Risk Map Available June 3

The first sclerotinia risk map for canola is planned for June 3. The first map will provide information on planting dates of canola (when 50% of the crop was planted in each county) and also will provide data on the soil moisture conditions. Moisture in the top four inches of soil is critical to the model for sclerotinia since the upper two inches of soil must be saturated for 10 days for the sclerotinia spore-producing structures, the *apothecia*, to form. The apothecia, tiny mushroom bodies resembling diminutive golf tees, release millions of air borne spores that initiate sclerotinia infections. The spores initiate growth on dead plant tissue, primarily the cast dead petals. The infection areas must be wet for the better part of 40-48 hours.

Subsequent risk maps will address the risk of sclerotinia infection in various areas of North Dakota and northwestern Minnesota. We will have better weather information this year than last with the addition of North Dakota Agricultural Weather Network (NDAWN) stations at Fingal and Pillsbury in Barnes County, Wishek in McIntosh County, Karlsruhe in McHenry County, Roseglen (Plaza) and Ross (Stanley) in Mountrail County, Berthold in Ward County and Crosby in Divide County, as well as Roseau in Roseau County, Minnesota and access to University of Minnesota weather station data at Karlstad in Kittson County and Williams in Lake of the Woods County, Minnesota. Actual risk will not begin in any given area until the earliest planted canola in the area begins flowering or until petal cast occurs.

The risk map will be posted on the web on the Northern Canola Growers Association website: <http://www.northerncanola.com> and on the NDSU Extension Service website: <http://www.ag.ndsu.nodak.edu/aginfo/sclerotinia/sclerotinia.htm>.

Reminder...



If you have not already done so, be sure to register for the Canola Open golf tournaments in either Minot or Langdon. Sponsorships are still available as well.

Thanks to the following Platinum Members of the Northern Canola Growers Association:



New Price Elections Announced for Crop Insurance

The U.S. Department of Agriculture recently announced higher price elections for selected 2002 crops under the Federal crop insurance program. Price elections are used in determining insurance protection, paying losses and calculating premiums.

The “additional” price elections are:

<u>Commodity</u>	<u>Additional Price</u>
Canola (lb)	\$0.096
Dry Peas (lb)*	
-Type 97 in MN, MT, ND	\$0.0633
-Type 99 in MN, MT, ND	\$0.1194
Flax (bu)	\$5.38
Oats (bu)	\$1.35
Soybeans (bu)	\$5.00
Sunflowers (Oil Type) (lb)	\$0.096

* The Dry Pea policy insures four types of dry peas. Only Types 97 (Smooth Greens and Yellows) and Type 99 (Lentils) in MN, MT, and ND will have an additional price for 2002.

Within the next 10 business days, insurance providers will notify policyholders who insured these crops for the 2002 crop year informing them that

- “additional” price elections are available for these selected crops;
- their price election in effect on the 2002 crop year sales closing date will remain in effect unless the policyholder provides notice to the agent or insurance provider that they wish to increase their price election to the higher price election (if a producer selected the “additional” price election last year, the producer would automatically have the higher level again this year and the producer’s premium will be calculated accordingly unless the producer notified their agent or insurance provider otherwise);
- notification by policyholders of their selection of the “additional” price election must be provided no later than 10 business days after the date of notice from the insurance provider of the availability of the “additional” price elections.

Producers should contact their local crop insurance agent if they have questions regarding how this announcement may impact their crop insurance coverage.

Growth Stages of Canola

—Duane Berglund, Extension Agronomist

Determining the growth stages of canola is relatively simple using a scale developed in Canada. This scale uses five principal stage designations and subdivides these into secondary stages. These stages are described below:

Stage	Description of main Raceme
0	Pre-emergence
1	Seedling - cotyledons showing
2	Rosette
	2.1 First true leaf expanded
	2.2 Second true leaf expanded
	2.3 Etc. for each additional leaf
3	Bud
	3.1 Flower cluster visible at center of rosette
	3.2 Flower cluster raised above level of rosette
	3.3 Lower buds yellowing
4	Flower
	4.1 First flower open
	4.2 Many flowers opened, lower pods elongating
	4.3 Lower pods starting to fill
	4.4 Flowering complete, seed enlarging in lower pods
5	Ripening
	5.1 Seeds in lower pods full size, translucent
	5.2 Seeds in lower pods green
	5.3 Seeds in lower pods green-brown or green-yellow, mottled yellow
	5.4 Seeds in lower pods yellow or brown
	5.5 Seeds in all pods brown, plant dead

With the new herbicide tolerant canola varieties one has to pay special attention to plant stage for last application. For Roundup Ready canola, application can be made from seedling emergence to bolting (3.1 to 3.2). For Liberty Resistant canola, the application can be made from seedling stage up until early bolting stage (3.2). For Clearfield canola varieties, Beyond application can be made up to just prior to bloom.

Canola in the 5.3 to early 5.4 stage should be near or at swathing stage. These stages change very rapidly during the ripening period if temperatures are warm and under dry conditions.

Determination of Canola Stands by Hoop Method

Frost has caused damage to some canola fields in several areas of the state this spring. Some growers may face difficult decisions on whether to keep the current stands or replant their fields to another crop. This article, taken from the NDSU ProCrop database, should assist growers in making their decisions. It does indicate that plant stands of 3-4 plants per sq. ft. can provide excellent yields. One thing that has continued to amaze even the most experienced agronomists is the ability of canola to compensate.

Established stands of canola are important to growers for both yield potential and weed competition. Minimum stands (plant populations) of 3-4 plants per sq. ft. are needed to obtain good yield potential. An ideal stand should be 8-12 plants per sq. ft.

An easy method to determine canola plant stands is the “hoop or circle” method. Use of a “hula hoop” or making one with a stiff wire or rod would also work. The area of a circle can be calculated:

$3.14 \times (\text{radius in inches})^2$	= sq. feet/circle
144	

Below are some calculated examples:

Hoop or circle diameter	Sq. feet/hoop
30 inches	4.9
32 inches	5.6
34 inches	6.3
36 inches	7.1
38 inches	7.9

When checking fields, toss the hoop at 10-12 sampling sites while scouting a field. Sample representative areas and stands throughout the field. Count the number of plants within the hoop at each throw and record. Average the number of plants found over the samples counted. To determine canola plant stands:

$\frac{\text{Ave. Number plants/hoop count}}{\text{sq. ft./hoop}}$	= number of plants per sq. foot
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example: 34 inch hoop with 44 plants avg./hoop count

$\frac{44}{6.3}$	= 7 plants/ft. sq.
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Number of plants per Acre:
7 plants x 43,560 sq. ft./A = 304,920 plants/A

If plant populations are 2 or less per sq. ft. then one should carefully scrutinize the stand. Is the sparse stand fairly uniform throughout the field. If this is true it perhaps can be left to grow, branch and compensate for the low populations. Other factors to consider would be weed control and competition with weeds, reseeding risks of planting late and hitting hot weather during bloom stage, seed and replanting costs, chemicals and possible herbicide residues for other crop choices.

Canola to be Promoted at National Food Show



Officials from the Northern Canola Growers Association will be attending the 2002 Institute of Food Technologists Food Expo in Anaheim, CA, June 15-19. A canola nutritional expert from the Saskatchewan Nutraceutical Network will accompany them to explain the functional food aspects of canola oil. The Institute of Food Technologists show has a very large attendance and is the #1 gathering of the world's food professionals. With 800 exhibitors from all over the world expected to participate, the 2002 IFT FOOD EXPO® is a centralized, global forum showcasing fresh applications in food science and technology, as well as improved products and services for every facet of the industry.

Canola oil will be showcased at the Northern Canola Growers Association booth at this expo as the first true functional food developed in North America. Canola oil's unique fatty acid ratio and lowest saturated fat ranking make it an ideal food product for functional food applications.

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