

GROUP	15	27	HERBICIDES
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A22670 HERBICIDE

AGRICULTURAL

SUSPENSION

A herbicide for use in field, seed, and sweet corn.

FOR SALE AND USE IN EASTERN CANADA ONLY

ACTIVE INGREDIENTS:

Bicyclopyrone.....	7.09 g ai/L
Mesotrione.....	32 g ai/L
S-metolachlor (and R-enantiomer).....	337 g ai/L

Contains 5-chloro-2-methyl-4-isothiazolin-3-one at 0.0013%, 2-methyl-4-isothiazolin-3-one at 0.0004% and 2-bromo-2-nitropropane-1,3-diol at 0.02% as preservatives.

**READ THE LABEL AND BOOKLET BEFORE USING
KEEP OUT OF REACH OF CHILDREN**

**WARNING - EYE AND SKIN IRRITANT
POTENTIAL SKIN SENSITIZER**

REGISTRATION NO.: 34207
PEST CONTROL PRODUCTS ACT

NET CONTENTS: **1 L to Bulk**

Syngenta Canada Inc.
140 Research Lane, Research Park
Guelph, Ontario N1G 4Z3
Telephone: 1-877-964-3682

LABEL

1.0 NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

2.0 FIRST AID

IN CASE OF POISONING, contact a physician or a poison control centre **IMMEDIATELY**. Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

If swallowed, call a poison control centre or doctor **IMMEDIATELY** for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

If in eyes, hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice.

If on skin or clothing, take off contaminated clothing. Rinse skin **IMMEDIATELY** with plenty of water for 15–20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled, move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

3.0 TOXICOLOGICAL INFORMATION

There is no specific antidote. Treat symptomatically.

4.0 PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN.

Causes eye irritation. DO NOT get in eyes. Causes skin irritation. DO NOT get on skin. Potential skin sensitizer.

Avoid all drift or contact with other vegetation.

Restricted Entry Intervals (REI): DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 days to perform hand-set irrigation related activities. For all other postapplication activities, DO NOT enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

DO NOT use or store near heat or open flame. **DO NOT** apply beyond the field boundary.

When tank-mixes are permitted, read and observe all label directions, including rates and restrictions for each product used in the tank-mix. Follow the more stringent label precautionary measures for mixing, loading and applying stated on both product labels.

DO NOT apply by air.

If this pest control product is to be used on a commodity that may be exported to other countries in the world and you require information on acceptable residue levels in these countries, please contact Syngenta Canada Inc. at 1-87-SYNGENTA/1-877-964-3682.

Keep away from food, drink and animal feed. Store in original container, tightly closed and in a safe place.

5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and chemical-resistant footwear during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) during mixing and loading. Gloves and protective eyewear are not required during application within a closed cab.

Wash the outside of the gloves before removing. Wash splashes from skin and eyes IMMEDIATELY with plenty of water.

If pesticide gets inside, remove clothing/PPE immediately. Wash yourself thoroughly and put on clean clothing.

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water.

While using product, do not eat, drink or use tobacco (including smoking).

All users should wash hands and shower thoroughly with soap and water after using A22670 Herbicide and before eating, drinking, chewing gum, using tobacco, applying cosmetics, or using the toilet.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product. Do not reuse them.

Wear freshly laundered clothes daily.

Do not wear contaminated shoes.

Wash clothing in detergent and hot water before reuse.

Store and wash all protective clothing separately from household laundry.

6.0 SPRAY DRIFT MANAGEMENT FOR GROUND APPLICATIONS

Apply only to agricultural crops when the potential for drift to areas of human habitation and human activity such as houses, cottages, schools and recreational areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

For the protection of non-target habitats, over-spray or drift to any body of water or other environmentally sensitive habitats must be avoided. The interaction of many equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all these factors when making application decisions.

7.0 ENVIRONMENTAL PRECAUTIONS

Toxic to small wild mammals, aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE.

This product demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

To reduce runoff from treated areas into aquatic habitats avoid application to areas with a moderate to steep slope, compacted soil or clay.

Avoid application when heavy rain is forecasted.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

8.0 STORAGE

Always store in original container with top tightly closed in a cool, dry place. To prevent contamination, store this product away from food or feed. Do not store A22670 Herbicide below -7°C . Storing A22670 Herbicide below -7°C can negatively affect product quality. Do not use or store near heat or open flame.

9.0 DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean up of spills.

Recyclable Containers

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

For Refillable Bulk Containers

For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not use this container for any other purpose.

***IN CASE OF EMERGENCY INVOLVING A MAJOR SPILL, FIRE OR POISONING,
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PAMPHLET

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CALL 1-800-327-8633 (1-800-FASTMED)***

10.0 PRODUCT INFORMATION

A22670 Herbicide is labeled for use in field corn, seed corn, and sweet corn for control of many annual grass and broadleaf weeds. A22670 Herbicide is a combination of the herbicides bicyclopyrone, mesotrione and S-metolachlor.

NOTE: A22670 Herbicide contains benoxacor that has been shown to enhance S-metolachlor metabolism in corn.

11.0 DIRECTIONS FOR USE

As this product is not registered for the control of pests in aquatic systems, **DO NOT** use to control aquatic pests.

DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Field sprayer application: **DO NOT** apply during periods of dead calm. Avoid application of this product when winds are gusty. **DO NOT** apply with spray droplets smaller than the American Society of Agricultural and Biological Engineers (ASABE S572.1) medium classification. Boom height must be 60 cm or less above the crop or ground.

DO NOT apply more than 3.7 L product/ha/season.

DO NOT apply any other mesotrione containing products to fields treated with A22670 Herbicide in the same year.

DO NOT apply by air.

11.1. Ground Application

It is important to check the physical compatibility of tank mixed pesticide products in a small volume prior to filling the sprayer. Check the compatibility of tank mixes containing A22670 Herbicide using a jar test with proportionate amounts of mix partners and water (or other carrier) before mixing in the spray tank.

11.2. Mixing Instructions

1. Ensure that the sprayer interior is clean, then fill the spray tank with $\frac{1}{2}$ the required amount of water or other carrier and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add A22670 Herbicide and agitate to ensure complete mixing.
4. Add any SE or SC formulation mix partners and agitate to ensure complete mixing.
5. Add any EC formulation mix partners and agitate to ensure complete mixing.
6. Fill the tank to $\frac{3}{4}$ the required amount of water.
7. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
8. Finish filling the sprayer with water, maintaining good agitation.
9. Always ensure that agitation is maintained until spraying is completed. After any break in spraying operations, agitate thoroughly before spraying again. Reduce agitation once tank volume is reduced to about one third of capacity.
10. A22670 Herbicide must be sprayed the same day as mixing. Do not allow spray solution to remain in the tank overnight.
11. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

When using chemical handling equipment to fill the sprayer, the following additional recommendations apply:

- WG and DF formulations are preferentially batch mixed.
- SC, SN, and SL formulations may be inducted or batch mixed.
- EC formulations are preferentially batch mixed.

11.3. Application in Liquid Fertilizers

Nitrogen solutions (such as 28-0-0 UAN), excluding suspension and sulphur containing fertilizers, may replace water as a carrier for pre-emergence applications of A22670 Herbicide in corn. Do not use nitrogen solutions as a carrier to corn that has emerged. Always predetermine the compatibility of A22670 Herbicide tank mixes with your liquid fertilizer carrier by mixing small proportional quantities in advance. Even if A22670 Herbicide is physically compatible with a fluid fertilizer, constant agitation is necessary to maintain a uniform mixture during application.

11.4. Spraying Instructions

1. Carrier Volume: Apply in a minimum spray volume of 150 L/ha as per the tabulated instructions below.
2. Sprayer Agitation: Use a jet agitator or liquid sparge tube which recirculates 7-10% of the tank per minute. DO NOT use an air sparger.

3. Pump: Screens should be used to protect the pump and prevent clogging. Use 16 mesh or coarser screens on the suction side of the pump. DO NOT place a screen in the recirculation line. Use 50 mesh or coarser screens between the pump and boom unless directed otherwise by the sprayer manufacturer.
4. Spray Nozzles: 80° or 110° drift reducing flat fan (e.g. those with a pre-orifice or turbulence chamber) or air induction nozzles are recommended. Use 50 mesh or coarser nozzle screens or as recommended by the nozzle manufacturer. DO NOT use flood type nozzles, controlled droplet application equipment, spray foils or hollow cone nozzles.
5. Pressure: As recommended by the nozzle manufacturer to achieve no finer than ASABE medium sized droplets.
6. Apply at uniform speed and avoid overlapping. Avoid operations that contribute to non-uniform application and the potential for crop injury.

Coarse sprays are less likely to drift, therefore, avoid combinations of pressure and nozzle type that will result in fine particles (mist). **DO NOT** apply during periods of dead calm or when wind velocity and direction pose a risk of spray drift. **DO NOT** spray when the wind is blowing towards a nearby sensitive crop, garden, terrestrial habitat (such as shelter-belt) or aquatic habitat.

11.5. Sprayer Cleanup

To avoid subsequent injury to other crops, thoroughly clean application equipment immediately after spraying each day. Ensure that all traces of the product are removed. Do not allow residue to dry in spray tank. Do not allow solution to remain in lines or tank overnight. The following procedures are recommended:

1. Drain and flush tank, boom and all hoses for several minutes with clean water. Ensure dead end lines are flushed. **Do not** clean the sprayer near desirable vegetation, wells or other water sources.
2. Prepare a cleaning solution of one part of household ammonia per 25 parts of water. A household detergent may also be added to the solution.
3. Use a pressure washer to clean the inside of the spray tank with this solution. Take care to wash all parts of the tank, including the inside top surface. If a pressure washer is not available, completely fill the sprayer with the cleaning solution to ensure contact of the cleaning solution with all internal surfaces of the tank and plumbing. Start agitation in the sprayer and thoroughly recirculate the cleaning solution for at least 15 minutes. All visible deposits must be removed from the spraying system.
4. Flush hoses, spray lines, and nozzles for at least 1 minute with the cleaning solution.
5. Dispose of all rinsings in accordance with provincial regulations.
6. Repeat steps 2-5.
7. Remove nozzles, screens and strainers and clean separately in the ammonia solution after completing the above procedures.
8. Rinse the complete spraying system with clean water.

11.6. Buffer Zones

Spot treatments using hand-held equipment **DO NOT** require a buffer zone.

The buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive terrestrial habitats (such as grasslands, forested areas, shelter belts, woodlots, hedgerows, riparian areas and shrublands), sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Method of application	Crop	Buffer Zones (metres) Required for the Protection of:				
		Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:		Terrestrial habitat
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m	
Field sprayer	Corn	2	1	1	1	5

For tank mixes, consult the labels of the tank-mix partners and observe the largest (most restrictive) buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASABE) category indicated on the labels for those tank mix partners.

The buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Buffer Zone Calculator on the Pest Management Regulatory Agency web site.

12.0 CROP USE DIRECTIONS

12.1. Field Corn

Field Corn - Surface pre-plant ¹ , pre-emergent and post-emergent (up to and including 6 leaf corn) ²	
PRODUCT RATE	4.5 L/ha
WEEDS	<p>Broadleaf weeds controlled (including triazine, group 2- and glyphosate-resistant biotypes): American nightshade³, Eastern black nightshade, common ragweed (suppression only), lamb's quarters, redroot pigweed, velvetleaf, wild mustard, waterhemp and Canada fleabane (1-20 cm)</p> <p>Grass weeds controlled (up to 2-leaf): Barnyard grass, crabgrass (smooth, hairy), fall panicum, foxtail (green, yellow, giant) and witchgrass</p> <p>Grass weeds suppressed: proso millet⁴</p>
PRODUCT RATE	3.6 L/ha ⁵
WEEDS	<p>Short season suppression of:</p> <p>Broadleaf weeds: lamb's quarters, redroot pigweed, common ragweed, velvetleaf, Eastern black nightshade, American nightshade, wild mustard and waterhemp</p> <p>Grass weeds (up to 2 leaf): barnyard grass, crabgrass (smooth, hairy), fall panicum, foxtail (green, yellow, giant), proso millet and witchgrass</p>

Field corn – Tank mixes - Surface pre-plant¹, pre-emergent and post-emergent (up to and including 6 leaf corn)⁶	
PRODUCT RATE	3.6 L/ha or 4.5 L/ha
WEEDS	Control or suppression of annual weeds listed above and burn-down of emerged annual and perennial weeds
TANK MIX PARTNER RATE/HA	900 g ae/ha glyphosate containing products that are registered for burndown of annual and perennial weeds ⁷
NOTES	Ground application only For pre-emergent uses, apply in a minimum of 150 L of carrier (water or UAN) per hectare. For post-emergent uses, apply in a minimum of 150 L of water per hectare.

¹ A22670 Herbicide may be applied to the soil surface up to 7 days before planting for minimum and no-till systems in corn. If possible, do not move the treated soil out of the row or move untreated soil to the surface during planting or weed control will be diminished.

² Application must be made prior to weed emergence or if weeds have emerged a tank mix with glyphosate containing products in glyphosate tolerant corn is recommended.

³ Pre-emergent treatments sometimes provide better control than pre-plant surface or post-emergent treatments.

⁴ Apply prior to proso millet emergence.

⁵ For surface preplant and pre-emergent timings, the 3 L/ha rate will provide suppression only through the critical crop establishment phase and is to be used in a planned weed management program with a post-emergent herbicide treatment. Monitor the species and growth stages of escapes in order to better select a post-emergent herbicide application.

⁶ Post-emergent applications on glyphosate-resistant corn only. Residual control or suppression of annual weeds and burn-down of emerged annual and perennial weeds.

⁷ Higher rates of glyphosate may be recommended in some situations. Refer to the glyphosate product label for further effective rates.

12.2. Seed and Sweet Corn

Seed and sweet corn	
APPLICATION TIMING	Pre-emergent only
WEEDS	Control or suppression of annual weeds listed above
PRODUCT RATE	4.5 L/ha
NOTES	Ground application only For pre-emergent uses, apply in a minimum of 150 L of carrier (water or UAN) per hectare.

12.3. Pre-Harvest Intervals (PHIs)

Do not harvest treated crop prior to the number of days specified in the table below.

Crops	PHI (days)
Field corn forage	45
Sweet corn ears and forage	45
Field corn grain and stover	Harvest at maturity

12.4. Use Precautions

A22670 Herbicide may be used pre-plant, pre-emergent or post-emergent on field corn and pre-emergent in production of seed corn and sweet corn. Not all seed corn inbreds and sweet

corn varieties have been tested; the use of A22670 Herbicide must be approved by the seed company and comply with the directions given by the seed corn company.

Although A22670 Herbicide has a flexible recropping profile, certain crops may be sensitive to low concentrations in the soil. Therefore, careful consideration should be given to crop rotation plans prior to using A22670 Herbicide (refer to "RECROPPING GUIDELINES").

Dry conditions following application may reduce the pre-emergent activity of A22670 Herbicide. If an activating rain (>1.25 cm) is not received within 7-10 days after a preemergent application, cultivate or use other weed control measures if weeds develop.

Do not apply to soils that contain less than 1% or more than 10% organic matter.

Temporary crop injury (bleaching) may occur under extreme weather conditions or when the crop is under stress due to inadequate or abnormally high moisture levels or extreme temperatures as well as under conditions of insect or plant disease attack, carryover of pesticide residues, use of certain soil applied systemic insecticides, improperly placed fertilizers or soil insecticides. The symptoms are most visible where excessive rates have been applied, such as sprayer overlaps. Corn quickly outgrows these effects and continues to grow normally.

Do not make a foliar post-emergent application of any organophosphate or carbamate insecticide within 7 days before or 7 days after an A22670 Herbicide application or severe corn injury may occur. Syngenta Canada Inc. will not be held responsible for losses or damage resulting from such use.

Severe corn injury and crop yield loss may occur if A22670 Herbicide is applied to corn crops that are treated with Lorsban™.

A22670 Herbicide may be applied prior to or following a pyrethroid-type insecticide such as FORCE® Insecticide or MATADOR® 120EC Insecticide.

Do not apply A22670 Herbicide through any type of irrigation system.

Syngenta will not recommend soybeans be planted the year following application of A22670 Herbicide on soils with a sand or loamy sand soil textural classification. For all other soil textural classifications, however, Syngenta will fully endorse soybeans planted the year following (11 months) application of A22670 Herbicide. Refer to "Recropping Guidelines" section for more information.

Protect sprayer operators from drift or mist. Additional information on spray drift management for GROUND APPLICATIONS is provided in the section "SPRAY DRIFT MANAGEMENT FOR GROUND APPLICATIONS". When low volumes of spray are applied, complete coverage and thorough application are essential for most effective results. Schedule applications in accordance with local conditions. Consult your local agricultural authorities for specific use information.

13.0 RECROPPING GUIDELINES

Certain crops have been shown to be sensitive to low residues of A22670 Herbicide in the soil.

The minimum recropping interval is the time between the last application of A22670 Herbicide and the anticipated date of planting of the next crop.

To avoid injury to subsequent crops after an application at the recommended rate of A22670 Herbicide, the following recropping intervals should be observed.

CROP	MINIMAL RECROPPING INTERVAL
Field Corn, Production Seed Corn, Silage Corn and Sweet Corn	Immediately (no restriction)
Winter Wheat	4.5 months
Spring Wheat	10 months
Soybeans (except on sand or loamy sand soils)*	11 months
All Other Crops	Bioassay (after 12 months)

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Observe the recropping guidelines of any product to be tank mixed with A22670 Herbicide.

In the event of crop failure, only field corn (grain or silage), seed corn or sweet corn can be planted as a salvage crop in the same fields in which the failed crop was treated with A22670 Herbicide. An application of A22670 Herbicide must NOT be made to the salvage crop.

Land treated with A22670 Herbicide CAN ONLY BE PLANTED TO A CROP NOT LISTED IN THE PRECEEDING TABLE if a field bioassay can be successfully performed. The bioassay must indicate normal growth with no yield reductions.

A bioassay may be conducted in any year following the year of application to assess the tolerance of the tested crop intended for planting in the year following the bioassay. Do not conduct a bioassay in the year of application. When conducting a field bioassay, it is very important to select a representative area(s) of the field previously treated with A22670 Herbicide to plant the test crop(s).

WARNING:

Do not plant any crop other than corn in the same year on land treated with A22670 Herbicide as injury may occur. Crops that may be planted following A22670 Herbicide are provided in the recropping guidelines. However, when the rotational crop is subjected to stress conditions, e.g. abnormally hot, dry weather, preceded by extended periods of dry weather the previous season, injury may occur. Do not tank mix with any other herbicide or additive unless listed on this label.

13.1. Field Bioassay

1. **Representative Sample:**

Ensure that soil parameters such as soil texture, depth of topsoil layer, soil pH and drainage of the test area selected are representative of the remainder of the field.

2. **Sample Size:**

The seeded area of each selected bioassay crop must be large enough to ensure that reliable results are obtained. The seedbed preparations and seeding of the bioassay crop(s) should be conducted the same way as when the entire field would be planted.

3. **Other Residual Herbicides:**

It is important that other herbicide products which are known to have residual activity were not applied to the field between the last application of A22670 Herbicide and the bioassay testing period. Avoid the use of other pesticides during the duration of the bioassay as they may damage the indicator crop(s).

4. **Comparisons:**

Ideally, an untreated check strip in a neighbouring field should be established and monitored for comparison since growing conditions can vary greatly from year to year and may result in erroneous results.

5. **Assessment:**

The site should be monitored regularly throughout the growing season. Watch for any damage to the crop such as thinning, yellowing or stunting. A yield sample should be taken and compared to an adjacent untreated field.

DO NOT ROTATE TO OTHER CROPS UNTIL THE BIOASSAY INDICATES NORMAL GROWTH WITH NO YIELD REDUCTIONS.

Failure to follow these recropping guidelines could result in injury to seeded crop(s).

ADHERE TO THESE PRODUCT LABELS FOR BROADLEAF AND GRASSWEEDS CONTROLLED, PRECAUTIONS, WARNINGS, RESTRICTIONS, TANK MIXING AND SPRAYING INSTRUCTIONS, ROTATIONAL CROPS AND DETAILED DIRECTIONS FOR USE REGARDING DOSAGE VARIATIONS ACCORDING TO SOIL TYPE.

14.0 RESISTANCE-MANAGEMENT RECOMMENDATIONS

For resistance management, A22670 Herbicide is a Group 15 and 27 herbicide. Any weed population may contain or develop plants naturally resistant to A22670 Herbicide and other Group 15 and/or 27 herbicides. The resistant biotypes may dominate the weed population if these herbicides are used repeatedly in the same field. Other resistance mechanisms that are not linked to site of action, but specific for individual chemicals, such as enhanced metabolism, may also exist. Appropriate resistance-management strategies should be followed.

To delay herbicide resistance:

Where possible, rotate the use of A22670 Herbicide or other Group 15 and/or 27 herbicides within a growing season (sequence) or among growing seasons with different herbicide groups that control the same weeds in a field.

Use tank mixtures with herbicides from a different group when such use is permitted. To delay resistance, the less resistance-prone partner should control the target weed(s) as effectively as the more resistance-prone partner.

Herbicide use should be based on an integrated weed management program that includes scouting, historical information related to herbicide use and crop rotation, and considers tillage (or other mechanical control methods), cultural (for example, higher crop seeding rates; precision fertilizer application method and timing to favour the crop and not the weeds), biological (weed-competitive crops or varieties) and other management practices.

Monitor weed populations after herbicide application for signs of resistance development (for example, only one weed species on the herbicide label not controlled). If resistance is suspected, prevent weed seed production in the affected area, if possible, by an alternative herbicide from a different group. Prevent movement of resistant weed seeds to other fields by cleaning harvesting and tillage equipment when moving between fields, and planting clean seed.

Have suspected resistant weed seeds tested by a qualified laboratory to confirm resistance and identify alternative herbicide options.

Contact your local extension specialist or certified crop advisors for any additional pesticide resistance-management and/or integrated weed-management recommendations for specific crops and weed biotypes.

For further information and to report suspected resistance, contact company representatives at 1-87-SYNGENTA (1-877-964-3682) or at www.syngenta.ca.

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