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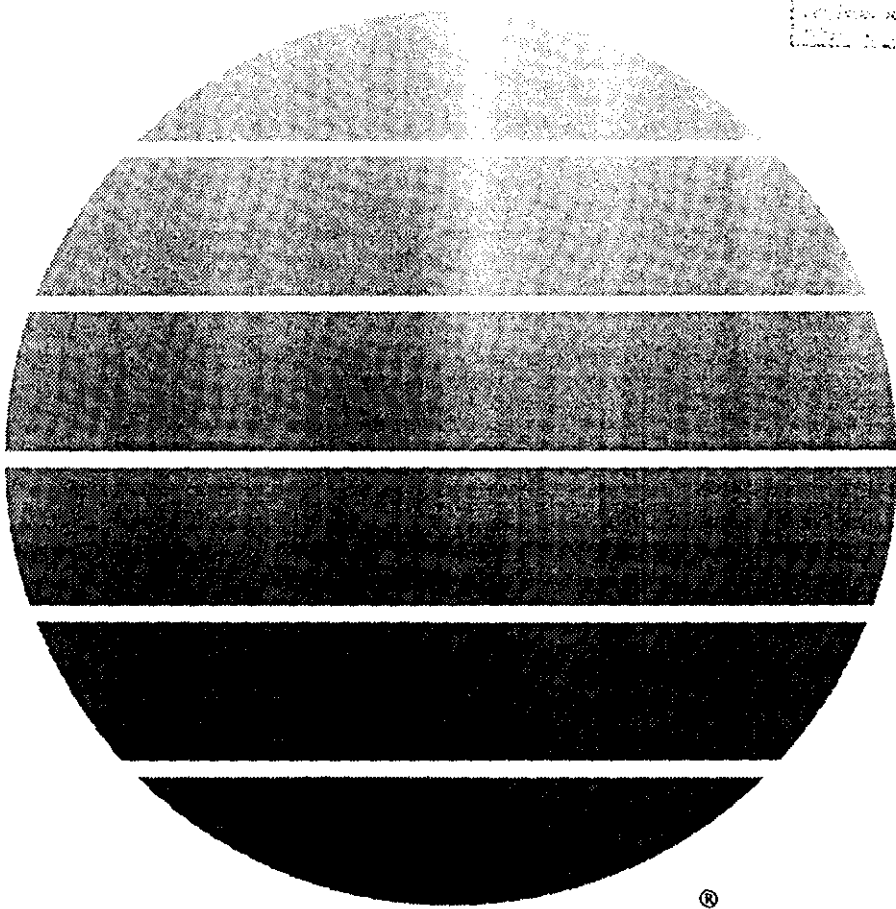
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Asana[®] XL

insecticide

ACCEPTED
FEB 10 1999
Under the Federal Insecticide,
Fungicide, and Rodenticide Act
Registration No. 352-515
EPA



“..... A Growing Partnership With Nature”

RESTRICTED USE PESTICIDE

DUE TO TOXICITY TO FISH AND AQUATIC ORGANISMS.

For retail sale to and use only by Certified Applicators or persons under their direct supervision and only for those uses covered by the Certified Applicator's certification.



Asana® XL

insecticide

This product contains 0.66 lbs. Active Ingredient per gallon.
0.66 Emulsible Concentrate

| Active Ingredient | By Weight |
|------------------------------------|--------------|
| Esfenvalerate | |
| (S)-cyano (3-phenoxyphenyl) methyl | |
| (S)-4-chloro-alpha-(1-methylethyl) | |
| benzeneacetate | 8.4% |
| Inert Ingredients* | 91.6% |
| TOTAL | 100 % |

* CONTAINS XYLENE RANGE AROMATIC SOLVENT

EPA Reg. No. 352-515
EPA EST No. 5905-AR-1

KEEP OUT OF REACH OF CHILDREN WARNING AVISO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.)

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. If vomiting has not occurred, emesis should be induced with supervision by a physician or professional staff. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

If in eyes: Flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

If on skin: Wash with soap and water immediately. After drying, apply vitamin E cream or oil if available. If not available, apply vegetable oil liberally over painful areas. The oil or cream may be used repeatedly until relief is achieved. Get medical help if irritation persists.

If inhaled: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

For medical emergencies involving this product, call toll free 1-800-441-3637.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING! May be fatal if swallowed. Harmful if inhaled. Do not get in eyes, on skin, or on clothing.

For medical emergencies involving this product, call toll free 1-800-441-3637.

PERSONAL PROTECTIVE EQUIPMENT

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category E on an EPA chemical-resistance category selection chart.

Applicators and other handlers must wear:

Long-sleeved shirt and long pants.

Chemical-resistant gloves, such as Barrier Laminatate or Neoprene Rubber or Nitrile Rubber or Viton.

Shoes plus socks.

Protective eyewear.

Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

PRECAUTIONARY STATEMENTS

(continued on next page)

PRECAUTIONARY STATEMENTS

(continued)

USER SAFETY RECOMMENDATIONS

USERS SHOULD: Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENGINEERING CONTROL STATEMENTS

When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR part 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops if bees are visiting the treatment area.

**WILDLIFE PROTECTION
IS EVERYONE'S RESPONSIBILITY**

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with the labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls.
- Chemical-resistant gloves, such as Barrier Laminate or Neoprene Rubber or Nitrile Rubber or Viton.
- Shoes plus socks.
- Protective eyewear.

GENERAL INFORMATION

ASANA XL Insecticide 0.66 Emulsible Concentrate contains 0.66 pounds of active ingredient per gallon. For the applications given below, mix the required amount of ASANA XL in sufficient diluent to provide uniform coverage (Refer to Use Tables). ASANA XL may be applied by ground or aerial application equipment.

RESISTANCE

Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, the use of this product should conform to resistance management strategies established for the use area. Consult your local or state agricultural authorities for details.

If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control. If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your local company representative or agricultural advisor for the best alternative method of control for your area.

INTEGRATED PEST MANAGEMENT

DuPont recommends the use of Integrated Pest Management (IPM) programs to control pests. This product may be used as part of an Integrated Pest Management (IPM) program which can include biological, cultural, and genetic practices aimed at preventing economic pest damage. Application of this product should be based on IPM principles and practices including field scouting or other detection methods, correct target pest identification, population monitoring, and treating when target pest populations reach locally determined action thresholds. Consult your state cooperative extension service, professional consultants or other qualified authorities to determine appropriate action treatment threshold levels for treating specific pest/crop or site systems in your area.

SPRAY PREPARATION

Spray equipment must be clean and free of previous pesticide deposits before applying ASANA XL.

SPRAY TANK CLEANOUT

Immediately following application of ASANA XL, thoroughly clean all mixing and spray equipment. Flush the tank, pump, hoses, and boom with several changes of water after removing nozzle tips and screens (clean these parts separately). Take all necessary precautions when cleaning equipment. Do not clean near wells, water sources or desirable vegetation. Dispose of waste rinse water in accordance with local regulations.

TANK MIXING

Do not tank mix ASANA XL with fungicides containing fentin hydroxide (triphenyltin hydroxide) such as Super Tin¹ as crop injury may result.

ASANA XL may be tank mixed with the herbicide products listed below when insect populations require control concurrent with the need for weed control. Follow all herbicide and ASANA XL label directions regarding proper usage. A "jar test" for physical compatibility should be conducted before field mixtures are made and applications initiated. For best results, use of spray equipment having continuous agitation is recommended.

ASANA XL may be used in combination with 2,4-D herbicides providing that the following mixing directions are followed: 1) Do not apply the combination in a volume of water less than 2 gallons per acre total spray. 2) Always mix the ASANA XL thoroughly in the total volume of spray water first, followed by the addition of the 2,4-D herbicide. Because of the availability of a great variety of 2,4-D herbicide products, a jar test for physical compatibility should be conducted before field mixtures of a particular combination are made.

BLADEX 4L HERBICIDE VELPAR HERBICIDE
CLASSIC HERBICIDE VELPAR L HERBICIDE

CHEMIGATION

Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) row, traveler, big gun, solid set, or hand move irrigation systems. Do not apply this product through any other type of irrigation system. ASANA XL may be premixed in a supply tank with water, oil, fertilizer, or other appropriate tank mixed agricultural chemicals. A pretest of physical compatibility for untried tank mixes is advised. Agitation may be necessary. Application should be in sufficient water and of sufficient duration to apply the recommended rate evenly to the entire treated area. No run-off can be permitted during chemigation. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water. Do not apply when wind speed favors drift beyond the area intended for treatment.

If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Do not connect an irrigation system (including greenhouse systems) used for ASANA XL application to a public water system.

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut-off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

CROP ROTATION

ALL ROTATION CROPS MAY BE PLANTED IMMEDIATELY FOLLOWING LAST APPLICATION.

SPRAY RECOMMENDATIONS AND PRECAUTIONS

- All aerial and ground application equipment must be properly maintained and calibrated using appropriate carriers.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES, OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

- Do not apply by ground within 25 feet, or by air within 150 feet of lakes; reservoirs; rivers; permanent streams, marshes, or natural ponds; estuaries and commercial fish farm ponds. Increase the buffer zone to 450 feet when ultralow volume (ULV) application is made.
- For aerial applications, the spray boom should be mounted on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of wing span or rotor diameter.
- Use the largest droplet size consistent with good pest control. Formation of very small droplets may be minimized by appropriate nozzle selection, by orientating nozzles away from the air stream as much as possible, and by avoiding excessive spray boom pressure.
- Spray should be released at the lowest height consistent with pest control and flight safety. Applications more than 10 feet above the crop canopy should be avoided.
- Make aerial or ground applications when the wind velocity favors on-target product deposition (approximately 3 to 10 mph). Do not apply when wind velocity exceeds 15 mph. Avoid applications when wind gusts approach 15 mph.
- Risk of exposure to aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.
- Do not cultivate within 10 feet of the aquatic area so as to allow growth of a vegetative filter strip.
- Low humidity and high temperatures increase the evaporation rate of spray droplets and therefore the likelihood of increased spray drift to aquatic areas. Avoid spraying during conditions of low humidity and/or high temperature.
- Do not make aerial or ground applications during temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

SPECIFIC USES—COTTON

| Crop | Insect | Application Rate | | Acres treated per gal of ASANA XL | Last Application (days to harvest) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------------|----------------------------------------------------------------------------|
| | | lb ai/acre | fl oz/acre | | |
| Cotton | Cotton Bollworm Tobacco Budworm Boll Weevil Beet Armyworm* Cabbage Looper Saltmarsh Caterpillar Cotton Leafworm Cutworms Lygus Bugs Plant Bugs Thrips (on seedling cotton) Leafhoppers Flea-hoppers Grasshoppers Whitefly** Cotton Aphid** Pink Bollworm | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | 21 |
| | NOTE: For light infestations of the above insects | 0.02 | 3.9 | 33 | |
| | Cotton Leaf Perforator | 0.03 | 5.8 | 22 | |
| <p>Apply as necessary to maintain control. To control Boll Weevil infestations, a 3 to 5 day interval between applications may be necessary. May be applied in water or nonvolatile vegetable oils. When applying ASANA XL in an oil carrier, apply a total spray volume of at least 1 qt per acre. When applying ASANA XL in a water carrier, apply at least 1 gal per acre by air (at least 3 gal per acre in Arizona and 5 gal per acre in California) or 4 gal per acre by ground. Do not apply more than 0.5 lb ai per acre per season. Do not graze livestock on treated fields or feed treated trash ASANA XL can provide contact ovicidal effect on Heliothis spp. eggs when applied according to label directions for control of tobacco budworm; application should be timed to correspond with peak egg deposition to achieve maximum ovicidal effect. Use on this pest stage (egg) is not registered in California. Do not make more than a total of 10 synthetic pyrethroid applications (of one product or combination of products) to a cotton crop in one growing season. Synthetic pyrethroid products include AMBUSH² insecticide, AMMO³ insecticide, ASANA XL insecticide, BAYTHROID⁴ emulsifiable pyrethroid insecticide, CAPTURE³ insecticide/miticide, DANITOL 2.4 EC⁵ Spray insecticide/miticide, DECIS⁶ insecticide, FURY³ insecticide, KARATE² insecticide, MUSTANG³ insecticide, POUNCE³ insecticide and SCOUT XTRA⁶ insecticide.</p> | | | | | <p>* Aids in control. ** Aids in suppression.</p> |

COTTON--TANK MIX COMBINATIONS

Read and follow all precautions and restrictions on the product label of each pesticide in the tank mix.

| Tank Mix Combinations | Insect | Application Rate | Last Application (days to harvest) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|----------------------------------------------------------|------------------------------------|
| LANNATE® LV Insecticide Water Soluble Liquid | Cotton Bollworm and Tobacco Budworm eggs | ASANA XL (from cotton table) with 2/5 pt/acre LANNATE LV | 21 |
| LANNATE® Insecticide Water Soluble Powder with adjuvant. | Cotton Bollworm and Tobacco Budworm eggs | ASANA XL (from cotton table) with 1/8 lb/acre LANNATE | |
| <p>Add adjuvant (X - 77, Bio - 88, Unite, Triton B - 1956 or equivalent*) to spray tank, then ASANA XL, then LANNATE; agitate until thoroughly mixed. *Compatibility of alternate should be determined before use.</p> | | | |

SPECIFIC USES - FIELD CROPS

| Crop | Insect | Application Rate | | Acres treated per gal of ASANA XL | Last Application (days to harvest) |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------------|------------------------------------|
| | | lb ai/acre | fl oz/acre | | |
| Corn (field)† | Cutworm Grasshopper Corn Earworm Stalk Borer Flea Beetle Corn Rootworm (adult control) Chinch Bug Southwestern Corn Borer Armyworm (True Armyworm) Corn Leaf Aphid Oat Bird-Cherry Aphid | 0.03 - 0.05 | 5.8 - 9.6 | 22-13 | 21 |
| | <p>Cutworm, Grasshopper - Apply as necessary to maintain control. Applications for cutworm control may be applied before, during, or after planting as required to protect emerging or emerged corn seedlings. Physical compatibility with herbicides and/or fertilizers should be determined prior to tank mixing ASANA XL with these products. Follow all herbicide/fertilizer recommendations and directions regarding proper usage.</p> <p>Corn Earworm - First application should be at or before silking. Subsequent applications should be made at 3 - 5 day intervals until silking is completed. Repeat applications may be applied if economically damaging populations exist.</p> <p>Stalk Borer, Flea Beetle - Application must be made early in migration from grassy areas to corn, before borers enter the plant. More than one application may be necessary.</p> <p>Adult Corn Rootworm - Apply at the first sign of silk feeding. Reinfestation may occur. Should reinfestation occur, apply as necessary to maintain control.</p> <p>ASANA XL Insecticide may be tank - mixed with Parathion (methyl and/or ethyl) and applied on field corn (and seed corn) where supplemental control of Adult Corn Rootworm is desired in conjunction with insects controlled by ASANA XL when used alone.</p> <p>Refer to the ASANA XL and Parathion (methyl or ethyl) labels for appropriate rates of the individual products for controlling the respective insects.</p> <p>Chinch Bug - Over the top sprays, as used for control of ear and stalk infesting corn pests, are not adequate for chinch bug control. It is very important that the spray be directed at the base of the plant through the use of drop nozzles or some other mechanism. Repeat as necessary to control migrating chinch bugs.</p> <p>Southwestern Corn Borer - Apply as necessary to maintain control. Two or more applications may be required. For moderate to heavy infestations, higher rates (0.036-0.05 lb ai per acre) are recommended.</p> <p>Armyworm - Apply as necessary to maintain control.</p> <p>Corn Leaf Aphid, Oat Bird-Cherry Aphid - For optimum results, direct the spray at the aphid population so as to achieve maximum coverage of the exposed insects. Aphids not contacted by the spray, such as in whorls and leaf axils, may not be adequately controlled.</p> | | | | |
| | European Corn Borer | 0.04 - 0.05 | 7.8 - 9.6 | 16 - 13 | |
| | <p>First brood: Spray while eggs are in the blackhead stage or before the larvae enter the whorl. Application by ground equipment is suggested. Good coverage of both upper and lower leaf surfaces is essential. This can be accomplished with drop nozzles over the row and on each side of the corn plant. Multiple applications may be required when egg laying is prolonged or where moderate to heavy populations are present. A higher rate is recommended for moderate to heavy populations. Proper coverage by ground equipment usually requires 20 - 30 gallons of carrier. Once larvae enter the whorl, foliar sprays will not provide adequate control.</p> <p>Second brood: Make applications when sufficient egg masses are found. Spray when eggs are in the blackhead stage or starting to hatch. When egg laying is prolonged or a third generation is present, additional sprays may be required. A higher rate is recommended for moderate to heavy populations. Good coverage above, below, and in the ear zone is essential. This usually requires 2 - 3 gallons of carrier by air. If ground equipment is used, drop nozzles on each side of the plant will provide best coverage.</p> <p>ASANA XL Insecticide may be tank - mixed with Parathion (methyl and/or ethyl) and applied on field corn (and seed corn) where supplemental control of European Corn Borer is desired in conjunction with insects controlled by ASANA XL when used alone.</p> <p>Refer to the ASANA XL and Parathion (methyl or ethyl) labels for appropriate rates of the individual products for controlling the respective insects</p> | | | | |
| | Western Bean Cutworm | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 | |
| | Apply as necessary to maintain control. Apply before larvae enter the ear. | | | | |
| | † Do not apply more than 0.25 lb ai per acre per season. | | | | |

| Crop | Insect | Application Rate | | Acres treated per gal of ASANA XL | Last Application (days to harvest) |
|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------------|------------------------------------|
| | | lb ai/acre | fl oz/acre | | |
| Corn (seed) | For specific insect control recommendations refer to Field Corn (above). Follow directions carefully. | | | | 21 |
| | Multiple applications and/or shortened intervals between sprays must be used to insure proper insect control. Do not apply more than 0.25 lb a.i. per acre per season. | | | | |
| Corn (pop) | For specific insect control recommendations refer to Field Corn (above). Follow directions carefully. | | | | 1 |
| | Multiple applications and/or shortened intervals between sprays must be used to insure proper insect control. Do not apply more than 0.5 lb a.i. per acre per season. | | | | |
| Peanuts | Corn Earworm Red-necked Peanut Worm Potato Leafhopper Velvetbean Caterpillar | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 | 21 |
| | Beet Armyworm * Granulate Cutworm Grasshoppers Cutworms | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | |
| | Lesser Cornstalk Borer* Fall Armyworm** | 0.05 | 9.6 | 13 | |
| | Apply as necessary to maintain control. Do not feed or graze livestock on treated vines. Do not apply more than 0.15 lb a.i. per acre per season. * Aids in control. ** Aids in control. For heavy infestations use of LANNATE Insecticide is recommended. Please refer to the LANNATE label for use instructions. | | | | |
| Sorghum (Grain) West of Mississippi River and East of Rocky Mountains | Sorghum Midge | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 | 21 |
| | Corn Earworm (headworm) Cutworms Chinch Bugs | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | |
| | Apply as necessary to maintain control. Do not apply more than 0.15 lb a.i. per acre per season. When applying in nonvolatile vegetable oils use a total spray volume of 1 or more qts per acre. Chinch Bug Control: For optimum results, spray should be directed at base of plants. | | | | |
| Soybean | Mexican Bean Beetle Green Cloverworm Velvetbean Caterpillar Potato Leafhopper Saltmarsh Caterpillar Woollybear Caterpillar | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 | 21 |
| | Cabbage Looper Corn Earworm Southern Green Stinkbug Bean Leaf Beetle Cutworms Three-cornered Alfalfa Hopper Beet Armyworm * Grasshoppers Japanese Beetle (adult) | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | |
| | Apply as necessary to maintain control. When applying in nonvolatile vegetable oils, use a total spray volume of at least 1 qt. Do not feed or graze livestock on treated fields. Do not apply more than 0.2 lb ai per acre per season. * Aids in control. | | | | |

| Crop | Insect | Application Rate | | Acres treated per gal of ASANA XL | Last Application (days to harvest) |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------------|------------------------------------|
| | | lb ai/acre | fl oz/acre | | |
| Sugar Beets v | Grasshoppers Beet Armyworm* Leafhoppers Cutworms (seedling spray) Saltmarsh Caterpillar Cabbage Looper Beet Webworm | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | 21 |
| | Apply as necessary, but do not apply more than 0.15 lb ai/acre per season. Apply with ground or air equipment using sufficient water to provide uniform coverage (minimum of 2 gal of water per acre). * Aids in control. | | | | |
| Sugarcane | Sugarcane Borer | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | 21 |
| | Apply as necessary to maintain control. Do not apply more than 0.2 lb ai/acre per season | | | | |
| Sunflower | Sunflower Beetle | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 | 28 |
| | Grasshoppers Cutworms Heliothis (complex) Sunflower Moth Sunflower Seed Weevil Banded Sunflower Moth Beet Armyworm* Sunflower Maggot Leafhoppers Sunflower Stem Weevil | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | |
| | Apply as necessary to maintain control. Do not apply more than 0.2 lb. ai/acre per season * Aids in control. | | | | |

SPECIFIC USES - FRUITS AND NUTS

DILUTE SPRAY: Apply specified dosage per 100 gallons of water in a uniform spray applied to the point of drip with conventional ground equipment. Do not exceed maximum number of gallons per acre indicated.

NOTE: In order to apply the correct amount of ASANA XL insecticide to your orchard you must know the number of gallons of water needed to spray one acre of your trees to the point of drip. If you do not already know this gallonage, you should conduct a test to determine it. If you do not know how to conduct such a test with your equipment, you should ask for assistance from your equipment dealer or State Extension specialist.

CONCENTRATE SPRAY: APPLY SPECIFIED DOSAGE PER ACRE IN NO LESS THAN 30 GALS. OF WATER PER ACRE BY GROUND. WHEN APPLYING "ASANA" XL BY AIR, CONSULT YOUR COOPERATIVE EXTENSION SERVICE FOR APPLICATION GUIDELINES.

| Crop | Insect | Application Rate | | | Acres treated per gal of ASANA XL | Last Application (days to harvest) |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------|----------------|-----------------------------------|------------------------------------|
| | | Concentrate Spray | | Dilute Spray | | |
| | | lb ai /acre | fl oz /acre | fl oz /100 gal | | |
| APPLES ✓ | Oblique Banded Leafroller Codling Moth Variegated Leafroller White Apple Leafhopper Tentiform Leaf Miner San Jose Scale (fruit infestations only) Apple Aphid Tufted Apple Budmoth Plum Curculio Oriental Fruit Moth Apple Maggot Red - Banded Leafroller Lesser Appleworm Green Fruitworm Rosy Apple Aphid Plant Bugs (Tarnished Plant Bug, Stink Bugs) Periodical Cicada | 0.025 - 0.075 | 4.8 - 14.5 | 2.0 - 5.8 | 26 - 9 | 21 |
| | Apple Ermine Moth (ID, OR & WA only) | | | 3.0 | | |
| <p>Apply as necessary to maintain control. Do not feed or graze livestock on treated orchard floors. Do not apply more than 0.525 lbs. a.i. per acre per season. For dilute spray apply 200 - 600 gals per acre, but do not apply more than 14.5 fl. oz. of ASANA XL per acre per treatment.</p> <p><u>Plant Bug, Rosy Apple Aphid Control</u> - - Time of application is critical in achieving control. Use prebloom and post bloom spray timings recommended by State Extension Services.</p> <p><u>Apple Ermine Moth</u>-Apply with 2 to 4 gallons of superior spray oil in 100 gallons of water in a spray-to-wet application to insure thorough coverage of all stems and branches where Apple Ermine Moth hibernacula are found.</p> <p>When using on apple nursery stock, do not treat bundled plants since it is difficult to achieve a full coverage application which could result in less than complete control.</p> <p>Make first application in the fall after 90% of leaf fall has occurred—usually after October 15. Make a second application 7 to 14 days later.</p> <p>Note: Overwintering larvae do not die until approximately 30 days after application.</p> | | | | | | |
| PEAR ✓ | Pear Psylla Codling Moth Green Fruitworm Plum Curculio Leafrollers Pear Slug Periodical Cicada | 0.025 - 0.075 | 4.8 - 14.5 | 2.0 - 5.8 | 26 - 9 | 28 |
| | <p>Apply as necessary to maintain control. Do not apply more than 0.375 lbs. a.i. per acre per season. Do not apply more than 0.225 lb. a.i. per acre between bloom and harvest. Do not feed or graze livestock on treated orchard floors. For dilute spray apply 200 - 600 gals per acre, but do not apply more than 14.5 fl. oz. of ASANA XL per acre per treatment.</p> | | | | | |
| PEAR ✓ (Dormant) | Pear Psylla | 0.05 - 0.1 | 9.6 - 19.2 | 7.3 - 12.8 | 13.2 - 6.6 | |
| <p>Apply during dormant to prebloom (white bud) stage only. Do not apply more than 0.2 lb a.i. per acre per season. Do not graze orchard floor. For dilute spray apply 150 - 250 gals per acre, but do not apply more than 19.2 fl. oz. of ASANA XL per acre per treatment.</p> | | | | | | |

| Crop | Insect | Application Rate | | | Acres treated per gal of ASANA XL | Last Application (days to harvest) |
|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------------|-----------------------------------|------------------------------------|
| | | Concentrate Spray | | Dilute Spray | | |
| | | lb ai /acre | fl oz /acre | fl oz /100 gal | | |
| STONE FRUITS (including apricots, cherries, nectarines, peaches, plums, prune plums,) | Peach Twig Borer Oriental Fruit Moth Peach Tree Borer Plum Curculio Lesser Peach Tree Borer Periodical Cicada Cherry Fruit Fly Western Cherry Fruit Fly American Plum Borer Black Cherry Aphid Leafrollers Leafhoppers Green Fruit worm Plant Bugs (Tarnished Plant Bug, Stink Bugs) | 0.025 - 0.075 | 4.8 - 14.5 | 2.0 - 5.8 | 26 - 9 | 14 |
| | Peach Twig Borer (Dormant) (CA only) | 0.04 - 0.075 | 8 - 14.5 | 3.1 - 5.8 | 16 - 9 | |
| | Apply as necessary to maintain control. Do not apply more than 0.375 lbs a.i. per acre per season with no more than 0.3 lbs. a.i. per acre per season between bloom and harvest. For dilute spray apply 200 - 400 gals per acre, but do not apply more than 14.5 fl. oz of ASANA XL per acre per treatment. Do not graze livestock on treated orchard floors. <u>Peach Tree Borer, American Plum Borer, Lesser Peach Tree Borer Control</u> - - Apply as directed trunk and scaffold limb spray. Thorough coverage of trunk and scaffold limbs is required. <u>Peach Twig Borer, Plum Curculio, Oriental Fruit Moth, Cherry Fruit Fly, Western Cherry Fruit Fly, Leafrollers, Black Cherry Aphid, Periodical Cicada Control.</u> - - Apply by ground sprayer to achieve thorough coverage of all aerial portions of the tree. <u>Plant Bug Control</u> - Time of application is critical in achieving control. Use prebloom and postbloom spray timings recommended by State Extension Services. <u>Peach Twig Borer (Dormant)</u> --Make application with an EPA registered dormant oil; for specific recommendations on use of oil consult manufacturer's label. For best performance, ground application equipment is recommended. | | | | | |
| Almonds | Navel Orangeworm Peach Twig Borer | 0.05 - 0.1 | 9.6 - 19.2 | 7.3 - 12.8 | 13.2 - 6.6 | 21 |
| | Peach Twig Borer (Dormant) (CA only) | Apply as necessary to maintain control. Do not apply more than 0.2 lb. a.i. per acre per season. Do not graze livestock on treated orchard floors. <u>Peach Twig Borer (Dormant)</u> --Make application with an EPA registered dormant oil; for specific recommendations on use of oil consult manufacturer's label. For best performance, ground application equipment is recommended. | | | | |
| Filberts | Filbert Worm Oblique Banded Leafroller | 0.05 - 0.1 | 9.6 - 19.2 | 7.3 - 12.8 | 13.2 - 6.6 | 21 |
| | Make first application after emergence of filbert worm moths in early summer. Do not apply a second treatment earlier than three weeks after the first. Do not apply more than 0.2 lb. a.i. per acre per season. For dilute spray, apply 200 - 400 gals. per acre, but do not apply more than 19.2 fl. oz of ASANA XL per acre per treatment. Do not graze livestock in treated orchards. | | | | | |

| Crop | Insect | Application Rate | | | Acres treated per gal of ASANA XL | Last Application (days to harvest) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------|-------------|----------------|-----------------------------------|------------------------------------|
| | | Concentrate Spray | | Dilute Spray | | |
| | | lb ai /acre | fl oz /acre | fl oz /100 gal | | |
| Pecans | Pecan Weevil Hickory Shuckworm Pecan Nut Casebearer Pecan Aphids Pecan Spittlebug | 0.025 - 0.075 | 4.8 - 14.5 | 2.0 - 5.8 | 26 - 9 | 21 |
| | Pecan Stem Phylloxera Pecan Leaf Phylloxera | | | | | |
| <p>Apply as necessary to maintain control. Do not feed or graze livestock on treated orchard floors. Do not apply more than 0.3 lbs. a.i. per acre per season. For dilute spray apply 200 - 600 gals per acre, but do not apply more than 14.5 fl. oz. of ASANA XL per acre per treatment.</p> <p><u>Phylloxera</u> - Correct timing of spray applications is critical in achieving optimum control of leaf and stem phylloxera. Consult local spray recommendations for correct times of application.</p> | | | | | | |
| Walnuts | Walnut Aphid Walnut Husk Fly Codling Moth Navel Orangeworm | 0.05 - 0.1 | 9.6 - 19.2 | 4.0 | 13 - 6 | 21 |
| | | | | | | |
| <p>Apply as necessary to maintain control. Do not apply more than 0.2 lb. a.i. per acre per season. For dilute sprays, apply 200 - 400 gals per acre. Do not feed or graze livestock on treated crop floors.</p> <p>NOTE: Use of baits in Walnut Husk fly sprays is recommended where endorsed by local Agricultural Extension Service.</p> <p>CONCENTRATE SPRAY: Apply specified dosage per acre in no less than 30 gals. of water per acre by ground or 5 gals. of water per acre by air.</p> | | | | | | |

SPECIFIC USES—VEGETABLE CROPS

| Crop | Insect | Application Rate | | Acres treated per gal of ASANA XL | Last Application (days to harvest) |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------------|------------------------------------|
| | | lb ai/acre | fl oz/acre | | |
| Artichoke | Artichoke Plume Moth | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | 1 |
| | <p>Apply as necessary to maintain control, but not more often than each 14 days. Apply no more than 0.15 lb. ai/acre between bud formation and harvest of an individual fruit. Apply in a minimum of 10 gallons per acre by air and 50 - 200 gallons per acre by ground (use sufficient water to obtain coverage without excessive runoff)</p> | | | | |
| Beans, Dry Peas, Dry Lentils | Mexican Bean Beetle Saltmarsh Caterpillar | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 | 21 |
| | Corn Earworm Potato Leafhopper Pea Aphid Grasshoppers Leafhoppers Cowpea Curculio Cutworms Cabbage Looper Western Bean Cutworm Velvetbean Caterpillar Beet Armyworm * Cucumber Beetle Corn Rootworm (Adults) Painted Lady Butterfly (larvae) Green Cloverworm | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | |
| | Pea Weevil (ID, OR & WA only) Pea Leaf Weevil (ID, OR & WA only) | 0.025 - 0.05 | 4.8 - 9.6 | 26 - 13 | |
| | <p>Apply as necessary to maintain control. Do not apply more than 0.2 lb a.i. per acre per season. Do not feed or graze livestock on treated vines.</p> <p>* Aids in control.</p> <p><u>Pea Weevil & Pea Leaf Weevil</u> - Time of application is critical in achieving control of pea weevil. For optimum results, apply at bloom prior to detecting adult pea weevils. Once adult pea weevil populations reach a level of 2 or more adults per 25 sweeps, control may be reduced.</p> | | | | |

| Crop | Insect | Application Rate | | Acres treated per gal of ASANA XL | Last Application (days to harvest) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------------|------------------------------------|
| | | lb ai/acre | fl oz/acre | | |
| Beans, Snap | Mexican Bean Beetle Saltmarsh Caterpillar | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 | 3 |
| | Potato Leafhopper European Corn Borer Corn Earworm Cucumber Beetle (adults) Flea Beetle Green Cloverworm Cutworm (seedling spray) Grasshoppers Pea Aphid Leafhopper Cabbage Looper Western Bean Cutworm Velvet Bean Caterpillar Beet Armyworm* Cucumber Beetle Corn Rootworm (adults) Leafminer (Guam only) | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | |
| Apply as necessary to maintain control but do not apply more than 0.2 lb ai per acre per season. Do not allow livestock to graze treated bean fields. Do not harvest treated bean vines for livestock forage, fodder, or hay. * Aids in control. | | | | | |
| Broccoli, (including Chinese Broccoli) Cabbage, Cauliflower, Chinese Cabbage (tight headed varieties only) | Imported Cabbageworm | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 | 3 |
| | Cabbage Looper Beet Armyworm * Alfalfa Looper Flea Beetle Grasshoppers Cutworm | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | |
| Apply as necessary to maintain control. Do not apply more than 0.4 lbs. a.i. per acre per season. * Aids in control. | | | | | |
| Carrots | Aster Leafhopper Cutworms Leafhoppers | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | 7 |
| | Carrot Weevil* | 0.05 | 9.6 | 13 | |
| Apply as necessary for control, but do not apply more than 0.5 lb ai/acre per season. For aerial application apply in a minimum of 5 gals water per acre. * Begin treatment when weevils become active. Thorough spray coverage of crown area is essential. Use of ground application is recommended. | | | | | |
| Collards | Imported Cabbageworm Cabbage Looper Beet Armyworm * Alfalfa Looper Flea Beetle Grasshopper Cutworm | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | 7 |
| | Apply as necessary to maintain control. Do not feed livestock on treated plant parts. Do not apply more than 0.2 lbs. a.i. per acre per season. For aerial application apply in a minimum of 5 gals water per acre. *Aids in control. | | | | |

| Crop | Insect | Application Rate | | Acres treated per gal of ASANA XL | Last Application (days to harvest) |
|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------------|------------------------------------|
| | | lb ai/acre | fl oz/acre | | |
| CUCUMBER, MELONS (Cantaloupe, Honeydew Melons, Watermelon, Muskmelon), PUMPKIN, SQUASH (Summer, Winter) | Pickleworm Rindworms Leafhoppers Corn Earworm Cabbage Looper Squash Bug Cutworms (seedling spray) Cucumber Beetle (adults) Grasshoppers Plant Bugs (Lygus Bugs, Stink Bugs) Squash Vine Borer | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | 3 |
| | Apply as necessary to maintain control. Do not apply more than 0.25 lbs. a.i. per acre per season. | | | | |
| Eggplant | Colorado Potato Beetle Flea Beetles Corn Earworm Loopers European Corn Borer | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | 7 |
| | Apply when insects are observed or when insect damage is observed. Repeat applications at 7 to 10 day intervals to achieve control. Do not apply more than 0.35 lbs. a.i. per acre per season. | | | | |
| Kohlrabi (TX only) | Cabbage Looper | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | 3 |
| | Apply as necessary to maintain control. Do not apply more than 0.4 lbs. a.i. per acre per season. | | | | |
| Lentils | See "Beans, Dry" | | | | |
| Lettuce, Head AZ, CA, CO, FL, NM & TX ONLY | Cabbage Looper Alfalfa Looper Heliothis spp. Beet Armyworm* | 0.025 - 0.05 | 4.8 - 9.6 | 26 - 13 | 7 |
| | Apply as necessary to maintain control. Do not apply more than 0.35 lbs. a.i. per acre per season. * Aids in control. | | | | |
| Mustard Greens | Cabbage Looper Imported Cabbageworm | 0.05 | 9.6 | 13 | 7 |
| | Repeat as necessary to maintain control. Do not exceed 0.2 lbs. a.i. per acre per season. | | | | |
| Peas, Dry | See "Beans, Dry" | | | | |
| Peas, Green | Pea Aphid Green Cloverworm | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 | 3 |
| | Cabbage Looper Celery Looper Alfalfa Looper Cutworms Armyworm Corn Earworm Imported Cabbageworm Alfalfa Caterpillar | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | |
| | Pea Weevil (ID, OR & WA only) Pea Leaf Weevil (ID, OR & WA only) | 0.025 - 0.05 | 4.8 - 9.6 | 26 - 15 | |
| | Apply as necessary to maintain control but do not apply more than 0.1 lb ai/acre per season. Do not feed treated pea vines to livestock. <i>Pea Weevil & Pea Leaf Weevil - Time of application is critical in achieving control of pea weevil. For optimum results, apply at bloom prior to detecting adult pea weevils. Once adult pea weevil populations reach a level of 2 or more adults per 25 sweeps, control may be reduced.</i> | | | | |

| Crop | Insect | Application Rate | | Acres treated per gal of ASANA XL | Last Application (days to harvest) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------------|------------------------------------|
| | | lb ai/acre | fl oz/acre | | |
| Pepper | European Corn Borer Beet Armyworm * Flea Beetles Corn Earworm Loopers Colorado Potato Beetle Pepper Weevil* Cucumber Beetle (adults) Southern Armyworm | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | 7 |
| | Apply when insects are observed or when insect damage is observed. Repeat applications at 7 to 10 day intervals to achieve control. Do not apply more than 0.35 lbs. a.i. per acre per season. * Aids in control. | | | | |
| Potato | Potato Psyllid Potato Tuberworm | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 | 7 |
| | Fleabeetles Tarnished Plant Bug Cabbage Looper Potato Aphid Potato Leafhopper Cucumber Beetle (adult control) Grasshoppers European Corn Borer Beet Armyworm* Western Yellow - Striped Armyworm Buckthorn Aphid Cutworms | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | |
| | Colorado Potato Beetle | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | |
| | Colorado Potato Beetle (Long Island, NY only) | 0.05 | 9.6 | 13 | |
| | Apply as necessary to maintain control. Do not apply more than 0.35 lb. a.i. per acre per season. * Aids in control. | | | | |
| | | | | | |
| Radishes | Armyworms Beetles | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | 7 |
| | Apply as necessary to maintain control. Do not apply more than 0.1 lb. ai/acre per season. | | | | |
| Sweet Corn † | Corn Earworm Southwestern Corn Borer European Corn Borer Beet Armyworm * Flea Beetles Sap Beetles (adults) Banded Cucumber Beetle Tarnished Plant Bug | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | 1 |
| | Begin applications either before or at time of silking and continue as necessary to maintain control. For protection against corn borers other than at silking time, treat when necessary to maintain control. For additional information consult directions for use under field corn. * Aids in control. | | | | |
| | Stalk Borer Cutworms Corn Rootworms (adults) Grasshoppers Chinch Bugs Armyworm | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | |
| | Western Bean Cutworm | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 | |
| | For additional information consult directions for use under field corn. | | | | |
| | Corn Leaf Aphid Oat Bird - Cherry Aphid | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | |
| For optimum results, direct the spray at the aphid population so as to achieve maximum coverage of the exposed insects. Aphids not contacted by the spray, such as in whorls and leaf axils, may not be adequately controlled. | | | | | |
| † Do not apply more than 0.5 lb a.i. per acre per season. | | | | | |

| Crop | Insect | Application Rate | | Acres treated per gal of ASANA XL | Last Application (days to harvest) | |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------------|------------------------------------|--|
| | | lb ai/acre | fl oz/acre | | | |
| Tomato | Tomato Hornworm Tobacco Hornworm | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 | 1 | |
| | Tomato Pinworm Flea Beetle Tomato Fruitworm Colorado Potato Beetle Cutworms Cabbage Looper Southern Armyworm Beet Armyworm * Western Yellow - Striped Armyworm Grasshoppers Whitefly Potato Aphid | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 | | |
| | Vegetable Leafminer** | 0.05 | 9.6 | 13 | | |
| | Apply as necessary to maintain control. Do not apply more than 0.5 lbs. a.i. per acre per season. | | | | | |
| | * Aids in control. | | | | | |
| | ** ASANA XL is not recommended for use on the Vegetable Leafminer in Florida. | | | | | |

SPECIALTY USES

| Crop | Insect | Application Rate | | Acres treated per gal of ASANA XL |
|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------|-----------------------------------|
| | | lb ai/acre | fl oz/acre | |
| NON - CROPLAND (excluding public land such as forests, parks, or recreational) | Grasshoppers Saltmarsh Caterpillar | 0.015 - 0.03 | 2.9 - 5.8 | 44 - 22 |
| | Armyworms Army Cutworms Chinch Bugs | 0.03 - 0.05 | 5.8 - 9.6 | 22 - 13 |
| | Spray non - cropland adjacent to tilled areas to control migrating insects (Grasshoppers, Armyworms) which are a threat to crops. Repeat applications as necessary to maintain control. Do not apply more than 0.5 lbs. active ingredient per acre per year. Do not feed treated crop to livestock. Do not spray ditch banks or areas adjacent to water. | | | |

| Crop | Insect | Dosage | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------------------|
| | | High Volume Sprays | | Low Volume Sprays (Mistblower) |
| | | lb ai/100 gal | fl oz/100 gal | lb ai/acre |
| CHRISTMAS TREE PLANTINGS, CONIFER SEED ORCHARDS, FOREST TREE NURSERIES ✓ | Nantucket Pine Tip Moth Spittlebugs Pineleaf Chermid Redheaded Pine Sawfly Balsam Woolly Adelgid Pine Chafer Red Pine Sawfly Pine Conelet Bug European Pine Sawfly Cranberry Girdler (adult control) Pine Needle Midge Balsam Twig Aphid Spruce budworm | 0.03 - 0.05 | 5.8 - 9.6 | 0.03 - 0.05 |
| | Apply as necessary to maintain control. Spray in sufficient gallonage to obtain good coverage of entire tree. | | | |
| | Pales Weevil Northern Pine Weevil | 0.03 - 0.05 | 5.8 - 9.6 | |
| | Apply as necessary to maintain control. Dilute formulation in kerosene (rather than in water), and spray tree stumps to control developing larvae. Use sufficient spray volume to cover stump thoroughly. | | | |
| | Coneworm Seedbug Seed Chalcid | Dosage 9.6 fl oz/100 gals water for high volume sprayers. 52 fl oz/100 gals water for low volume sprayers. 0.19 lb. ai/acre application in not less than 10 gals of water for aerial applications. | | |
| Apply first application within 1 week of female flower closure or peak pollen flight for Webbing Coneworm control. For other Coneworms and Seedbugs, apply first application within 30 days following female flower closure. Repeat application at intervals of 4 weeks but do not apply more than 1.6 lbs. ai per acre per year. For Seed Chalcid control, apply when all cones are pendant, and repeat at 1 - 2 week intervals for 2 or more sprays, or as needed. Apply approximately 5 - 10 gals of the 9.6 fl oz/100 gal dilution per tree with high volume sprayers. With low volume sprayers apply 100 gals of the 52 fl oz/100 gal dilution per acre. Do not graze or harvest cover crop. Avoid contact with open water. | | | | |

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

STORAGE: Store in a secure, dry and temperate area. Store in original container. Keep container closed when not in use. Do not store near food or feed. Do not use or store around the home. Avoid contact with water. In case of spill or leak, soak up with sand, earth or synthetic absorbent (do not use alkaline absorbents) and dispose of wastes in compliance with local, State and Federal regulations.

PRODUCT DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent), then offer for recycling or reconditioning if container reuse is permitted. If container reuse is prohibited, puncture metal containers and dispose of in a sanitary landfill, or by other approved State and local procedures. Dispose of plastic containers in a sanitary landfill, or by incineration if allowed by State and local authorities. If burned, stay out of smoke.

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