

APPLICATION GUIDELINES

ACADIAN® is derived exclusively from marine plants harvested from the nutrient-rich waters of Eastern Canada. Consistent use of **ACADIAN®** supplements a well-balanced crop nutrition program. Use **ACADIAN®** to increase desirable yield, improve overall plant nutrition, improve root growth and development, improve plant vigor, and maximize crop potential during periods of stress. To achieve the desired results, the levels of major and minor nutrients must be adequate to support the increase in production. The following rates and timings of application are recommended for optimum efficacy.

Compatibility: **ACADIAN®** is compatible with most insecticides, fungicides and fertilizers. Some pH adjustments may be required with acidic mixtures. Add surfactants after the product has completely dissolved in the tank solution. When mixing with chemical products, thoroughly mix **ACADIAN®** with the water in the tank prior to adding the calcium product. If interaction of chemicals is unknown, a "jar" compatibility test is recommended.

Storage and Handling: This product contains a preservative but should be stored away from intense sunlight and heat. Avoid spillage as product is very slippery and may create a hazard.

DIRECTIONS FOR USE

ACADIAN® fully dissolves in water and is suitable for use in liquid foliar, soil applied, and irrigation water applications. Regular applications are important for maximizing crop potential during unexpected stress.

Foliar Applications: Fill half the spray tank with water, begin agitating and gradually add recommended amount of **ACADIAN®** with remainder of water and spray solution. Use enough water for good spray coverage. The foliar spray should be applied as a fine mist, with low fluid velocity until the foliage is wet. Do not foliar-apply during times of moisture or heat stress. For best results apply during the cool part of the day or when temperatures are below 85 degrees Fahrenheit. Do not spray just before or after rainfall or sprinkler irrigation. Use a surfactant for maximum dispersal and leaf adherence. Application rates for permanent crops should be adjusted based on plant size and leaf area.

Soil applications: Soil applied treatments can be made by mixing with soil-applied fertility, directed sprays to the soil, sidedress treatments, applications through the irrigation systems or other methods which effectively apply **ACADIAN®** to the soil. When making irrigation treatments dilute 1 part **ACADIAN®** in a minimum of 50 parts of finished solution and agitate thoroughly. Continuous agitation of the supply tank is recommended. **ACADIAN®** can be applied through drip, microjet, sprinkle, overhead, furrow, flood and other types of irrigation at the suggested rates. For micro sprinkler, solid set or drip irrigation, apply after the system is fully pressurized, inject finished solution for at least one hour and follow with clean water for at least two hours. Avoid heavy irrigations immediately following application.

Rooting/Transplant Solution: To encourage root growth of new transplants, treat roots with a solution of **ACADIAN®** at the rate of 0.1 – 0.7% solution prior to transplanting.

Late Season and Post-Harvest Applications: **ACADIAN®** is an excellent way to encourage root growth and prepare perennial crops for next season's early growth. Apply to the soil or foliar using above methods.

ADDITIONAL APPLICATIONS SHOULD BE MADE IMMEDIATELY PRIOR TO OR FOLLOWING STRESS PERIODS SUCH AS CHILL, HEAT OR DROUGHT.

WARRANTY STATEMENT: The manufacturer warrants that this product conforms to its chemical description and is reasonably fit for the purposes stated on the label when used in accordance with the directions under normal conditions of use. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as weather conditions, presence of other materials or the manner of use or application, all of which are beyond the control of the manufacturer. In no case shall the manufacturer be liable for consequential, special or indirect damages resulting from the use or handling of this product. The manufacturer makes no warranties of merchantability or fitness for a particular purpose nor any other express or implied warranty except as stated above.

GENERAL CROP APPLICATION RATES

Woody Perennial Crops (Trees, Vines, Bushes, etc.): Apply 64 to 128 ounces of **ACADIAN®** per acre starting at regrowth in the spring. Repeat treatments every 7-30 days. At transplanting, a root treatment can be used. Post-harvest applications can be made every 1-4 weeks from harvest to dormancy. Applications can be made either foliar or to the soil. Apply 3-5 days prior to an anticipated plant stress.

Other Fruit, Vegetable and Field Crops: Apply 32 to 64 ounces of **ACADIAN®** per acre starting at planting with repeat treatments every 7-30 days. Applications can be made either foliar or to the soil. Apply 3-5 days prior to an anticipated plant stress.

SPECIFIC APPLICATION RATES: FRUIT CROPS

Crop	Application Rates and General Recommendations
Avocados	64 TO 128 OUNCES PER ACRE <i>1st application:</i> at start of regrowth in the spring <i>2nd application:</i> 2 weeks pre-bloom <i>3rd application:</i> 2 weeks after petal fall <i>4th application:</i> before summer fruit drop <i>Repeat:</i> every 2-4 weeks during summer months <i>Post-harvest application:</i> 2-4 weeks after harvest
Bushberries (Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, etc.)	64 OUNCES PER ACRE <i>1st application:</i> 4 weeks pre-bloom (soil) <i>2nd application:</i> 2 weeks pre-bloom <i>3rd application:</i> petal fall <i>Repeat:</i> every 2-4 weeks during summer months <i>Post-harvest application:</i> 2-4 weeks after harvest
Caneberries (Blackberry, Loganberry, Raspberry, etc.)	64 OUNCES PER ACRE <i>1st application:</i> at start of growth in the spring <i>2nd application:</i> 2 weeks pre-bloom <i>3rd application:</i> petal fall <i>Repeat:</i> every 2-4 weeks during summer months <i>Post-harvest application:</i> 2-4 weeks after harvest
Citrus (Grapefruit, Lemons, Limes, Mandarins, Oranges, etc.)	64 TO 128 OUNCES PER ACRE <i>1st application:</i> start of growth in the spring (feather growth) <i>2nd application:</i> 2 weeks pre-bloom <i>3rd application:</i> petal fall <i>Repeat:</i> every 2-4 weeks during summer <i>Fall:</i> apply with gibberellin sprays in mid and late season varieties <i>Post-harvest application:</i> 2-4 weeks after harvest
Cranberries	64 TO 128 OUNCES PER ACRE <i>1st application:</i> 4 weeks pre-bloom (soil) <i>2nd application:</i> 2 weeks pre-bloom <i>3rd application:</i> petal fall <i>Repeat:</i> every 2-4 weeks <i>Post-harvest application:</i> 2-4 weeks after harvest
Grapes (Wine)	64 TO 128 OUNCES PER ACRE <i>1st application:</i> 1-4 inch shoot growth (foliar and soil) <i>2nd application:</i> 10-12 inch shoot growth (foliar and soil) <i>3rd application:</i> 5 days pre-bloom (foliar) Avoid foliar pre-bloom application in varieties that are prone to under shatter. Use high rate in pre-bloom sprays on varieties that tend to over shatter. <i>4th application:</i> BB sized berries (2-3 mm) (foliar) <i>5th application:</i> veraison (foliar and soil) <i>Repeat:</i> every 2-4 weeks during summer months <i>Post-harvest application:</i> 2-4 weeks after harvest
Grapes (Table, Raisin and Juice)	64 TO 128 OUNCES PER ACRE <i>1st application:</i> 1-4 inch shoot growth (foliar and soil) <i>2nd application:</i> 10-12 inch shoot growth (foliar and soil) <i>3rd application:</i> 5 days pre-bloom (foliar) Avoid foliar pre-bloom application in varieties that are prone to under shatter. Use high rate in pre-bloom sprays on varieties that tend to over shatter. <i>4th-6th applications:</i> sizing sprays (foliar) <i>7th application:</i> veraison (foliar and soil) <i>Repeat:</i> every 2-4 weeks during summer months <i>Post-harvest application:</i> 2-4 weeks after harvest
Kiwi	64 TO 128 OUNCES PER ACRE <i>1st application:</i> at start of growth in the spring <i>2nd application:</i> 2 weeks pre-bloom <i>3rd application:</i> petal fall <i>Repeat:</i> every 2-4 weeks during summer months <i>Post-harvest application:</i> 2-4 weeks after harvest
Olives	64 TO 128 OUNCES PER ACRE <i>1st application:</i> late winter (foliar) <i>2nd application:</i> 2 weeks pre-bloom <i>Repeat:</i> every 2-4 weeks through to harvest <i>Post-harvest application:</i> 2-4 weeks after harvest
Figs	64 TO 128 OUNCES PER ACRE <i>1st application:</i> at start of growth in the spring <i>Repeat:</i> every 2-4 weeks <i>Post-harvest application:</i> 2-4 weeks after harvest

FRUIT CROPS CONTINUED

Crop	Application Rates and General Recommendations
Pome Fruits (Apples, Pears and Quince)	64 TO 128 OUNCES PER ACRE <i>1st application:</i> tight cluster <i>2nd application:</i> pink bud <i>3rd application:</i> petal fall <i>4th application:</i> 1/2-3/4" fruit <i>Repeat:</i> every 2-4 weeks during summer months <i>Post-harvest application:</i> 2-4 weeks after harvest
Stone Fruits (Peaches, Nectarines, Apricots, Plums, Prunes, etc.)	64 TO 128 OUNCES PER ACRE <i>1st application:</i> pink/white bud <i>2nd application:</i> petal fall <i>3rd application:</i> jacket split <i>Repeat:</i> every 2-4 weeks during summer months <i>Post-harvest application:</i> 2-4 weeks after harvest
Cherries	64 TO 128 OUNCES PER ACRE <i>1st application:</i> white bud <i>2nd application:</i> petal fall to shuck fall <i>3rd application:</i> exposed young fruit <i>4th application:</i> straw color Apply with gibberellin sprays. Avoid sprays after straw-colored fruit on non-gibberellin blocks where early market is desired. <i>Repeat:</i> during times of stress <i>Post-harvest application:</i> 2-4 weeks after harvest
Pomegranate	64 TO 128 OUNCES PER ACRE <i>1st application:</i> start of growth in the spring <i>2nd application:</i> 2 weeks pre-bloom <i>3rd application:</i> petal fall <i>Repeat:</i> every 2-4 weeks <i>Post-harvest application:</i> 2-4 weeks after harvest
Strawberries	64 OUNCES PER ACRE <i>Pre-plant:</i> 0.1 – 0.7% solution <i>Repeat:</i> soil applications every 14 days until harvest is complete
Pineapple	64 TO 128 OUNCES PER ACRE Foliar or soil applications at planting. <i>Repeat:</i> every 2-4 weeks during the growth and fruit development periods.
Hydroponic Strawberries	4.5 TO 9.0 OUNCES PER 100 GALLONS OF WATER In substrate culture systems, apply continuously with each fertigation cycle. In closed systems, reapply every 7-14 days.

SPECIFIC APPLICATION RATES: VEGETABLE CROPS

Crop	Application Rates and General Recommendations
Asparagus	48 TO 64 OUNCES PER ACRE For new plants, make a soil application at planting followed by soil or foliar applications every 14-21 days. For established plants, begin applications when harvest is complete and repeat every 14-21 days.
Brassica Vegetables (Broccoli, Brussels Sprouts, Cauliflower, Collards, Cabbage, Kale, and Mustard Greens)	48 TO 64 OUNCES PER ACRE <i>1st application:</i> soil or transplant treatment at planting <i>Repeat:</i> soil or foliar applications every 14-21 days until harvest is complete
Bulb Vegetables (Garlic, Leeks, Onions, and Shallots)	48 TO 64 OUNCES PER ACRE <i>1st application:</i> soil applied treatment at planting <i>Repeat:</i> soil or foliar applications every 14-21 days until harvest is complete
Corn (Fresh, Sweet, and Pop)	32 TO 64 OUNCES PER ACRE <i>1st application:</i> soil treatment at planting <i>2nd application:</i> soil or foliar applications at the pretassel stage
Cucurbit Vegetables (Cantaloupe, Cucumbers, Gourds, Honeydew, Muskmelons, Squash, Pumpkins, and Watermelons)	32 TO 64 OUNCES PER ACRE <i>1st application:</i> soil or transplant treatment at planting <i>Repeat:</i> soil or foliar applications every 14-21 days until harvest is complete
Fruiting Vegetables (Eggplant, Fresh Tomatoes, Processing Tomatoes, and Peppers)	48 TO 64 OUNCES PER ACRE <i>1st application:</i> soil or transplant treatment at planting <i>Repeat:</i> soil or foliar applications every 14-21 days until harvest is complete. Use adequate water for very good coverage. Minimum 40 GPA for mature plants is recommended.

VEGETABLE CROPS CONTINUED

Crop	Application Rates and General Recommendations
Leafy Vegetables (Celery, Endive, Lettuce, Radicchio, Rhubarb, Spinach and Swiss Chard)	32 TO 64 OUNCES PER ACRE <i>1st application:</i> foliar application at the 2-4 leaf stage <i>Repeat:</i> foliar applications every 14-21 days until harvest
Legumes Fresh, Dry and Processing (Beans, Garbanzos, Lentils, Peas and Soybeans)	48 TO 64 OUNCES PER ACRE <i>1st application:</i> soil applied treatment at planting <i>Repeat:</i> soil or foliar applications every 14-21 days until harvest
Potatoes	48 TO 64 OUNCES PER ACRE <i>1st application:</i> soil applied treatment at planting <i>Repeat:</i> soil or foliar applications every 21-30 days until harvest
Peanuts	48 TO 64 OUNCES PER ACRE <i>1st application:</i> soil applied treatment at planting <i>Repeat:</i> soil or foliar applications every 14-21 days until harvest
Root and Tuber Vegetables (Beets, Carrots, Sweet Potatoes, etc.)	48 TO 64 OUNCES PER ACRE <i>1st application:</i> soil applied treatment at planting <i>Repeat:</i> soil or foliar applications every 14-21 days until harvest
Hydroponic Cucumbers	0.45 TO 0.90 OUNCES PER 100 GALLONS OF WATER In substrate culture systems, apply continuously with each fertigation cycle. In closed systems, reapply every 7-14 days.
Hydroponic Lettuce	0.45 TO 0.90 OUNCES PER 100 GALLONS OF WATER In substrate culture systems, apply continuously with each fertigation cycle. In closed systems, reapply every 7-14 days.
Hydroponic Peppers and Tomatoes	0.45 TO 0.90 OUNCES PER 100 GALLONS OF WATER In substrate culture systems, apply continuously with each fertigation cycle. In closed systems, reapply every 7-14 days.

SPECIFIC APPLICATION RATES: FIELD CROPS

Crop	Application Rates and General Recommendations
Alfalfa	32 TO 64 OUNCES PER ACRE <i>1st application:</i> soil or foliar application at planting or early season growth <i>Repeat:</i> soil or foliar applications after each cutting or every 3-4 weeks
Corn (Grain, Feed, Forage and Silage)	32 TO 64 OUNCES PER ACRE <i>1st application:</i> soil treatment at planting <i>2nd application:</i> soil or foliar applications at the pretassel stage. Applications can be made either foliar or to the soil. Apply 3-5 days prior to an anticipated plant stress.
Seed Corn	32 TO 64 OUNCES PER ACRE Apply starting at planting with repeat treatments every 7-30 days. Applications can be made either foliar or to the soil. Apply 3-5 days prior to an anticipated plant stress.
Cotton	32 TO 64 OUNCES PER ACRE <i>1st application:</i> soil applied treatment at planting <i>Repeat:</i> soil or foliar applications every 14-21 days
Hops	32 TO 64 OUNCES PER ACRE <i>1st application:</i> at start of training in the spring <i>Repeat:</i> every 2-4 weeks
Rice	32 TO 64 OUNCES PER ACRE <i>1st application:</i> 30-40 days after seeding <i>2nd application:</i> at early panicle emergence Applications can be made either foliar or to the soil. Apply 3-5 days prior to an anticipated plant stress.
Wheat	32 TO 64 OUNCES PER ACRE <i>1st application:</i> soil applied treatment at planting <i>Repeat:</i> soil or foliar treatments at the 6 and 12-18 inch growth stage

SPECIFIC APPLICATION RATES: NUTS

Crop	Application Rates and General Recommendations
Almonds	64 TO 128 OUNCES PER ACRE <i>1st application:</i> pink bud <i>2nd application:</i> petal fall <i>3rd application:</i> before summer heat stress (late May, early June) <i>Repeat:</i> every 2-4 weeks during summer months <i>Post-harvest application:</i> 2-4 weeks after harvest
Hazelnuts	64 TO 128 OUNCES PER ACRE <i>1st application:</i> at ovule growth initiation <i>2nd application:</i> first leaf expansion <i>Repeat:</i> every 2-4 weeks until harvest <i>Post-harvest application:</i> 2-4 weeks after harvest
Pistachios	64 TO 128 OUNCES PER ACRE <i>1st application:</i> at early bud break <i>2nd application:</i> at bloom <i>3rd application:</i> fully leaved out <i>Repeat:</i> every 2-4 weeks during summer months <i>Post-harvest application:</i> 2-4 weeks after harvest
Tree Nuts (Cashews, Pecans, Walnuts, Chestnuts, Macadamia, etc.)	64 TO 128 OUNCES PER ACRE <i>1st application:</i> 1% bloom <i>2nd application:</i> 30% bloom <i>3rd application:</i> 2 weeks after previous application <i>Repeat:</i> every 2-4 weeks during summer months <i>Post-harvest application:</i> 2-4 weeks after harvest

SPECIFIC APPLICATION RATES: OTHER CROPS

Crop	Application Rates and General Recommendations
Herbs and Spices	32 TO 64 OUNCES PER ACRE <i>1st application:</i> soil or transplant treatment at planting <i>Repeat:</i> applications every 14-21 days.
Vegetable Seed Crops (all varieties)	32 TO 64 OUNCES PER ACRE <i>1st application:</i> at planting (soil) <i>Repeat:</i> every 14-21 days Apply as foliar spray pre-bloom and 7-10 days before beginning 'dry down' prior to harvest.
Coffee	64 TO 128 OUNCES PER ACRE Foliar or soil applications at planting. Repeat treatments every 14-30 days. Post-harvest applications can be made every 2-4 weeks after harvest. Apply 3-5 days prior to an anticipated plant stress.
Cacao	64 TO 128 OUNCES PER ACRE Foliar or soil applications at planting. Repeat treatments every 14-30 days. Post-harvest applications can be made every 2-4 weeks after harvest. Apply 3-5 days prior to an anticipated plant stress.
Papaya	64 TO 128 OUNCES PER ACRE Foliar or soil applications at planting. Repeat treatments every 14-30 days. Post-harvest applications can be made every 2-4 weeks after harvest. Apply 3-5 days prior to an anticipated plant stress.
Turf	Make a 0.1% to 0.3% solution of ACADIAN® or apply 0.5 to 1.0 ounce per 1,000 square feet; apply to the root zone and/or foliage every 7-14 days.
Field Ornamentals	Make a 0.1% to 0.3% solution of ACADIAN®; apply to the root zone or foliage every 7-14 days.
Hydroponic Cut Flowers	0.45 OUNCES PER 100 GALLONS OF WATER In substrate culture systems, apply continuously with each fertigation cycle. In closed systems, reapply every 7-14 days.

For your convenience, ACADIAN® product information is available on Agrian database (<http://agrian.com/home/>) as well as in Crop Data Management Systems database (<http://www.cdms.net/>).

It is easy to have access to Acadian's years of scientific research - just visit www.acadianseaplants.com and follow the link to request a username and password to the Acadian Information Portal.



100% LIQUID SEAWEED CONCENTRATE
0.1 | 0.0 | 5.0

GUARANTEED ANALYSIS

Total Nitrogen (N)	0.1%
0.1% Water Soluble Nitrogen	
Soluble Potash (K ₂ O)	5.0%
Derived from <i>Ascophyllum nodosum</i>	

Manufactured by:

Acadian Seaplants

PRODUCT OF CANADA

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