



acadian®

100% SOLUBLE SEAWEED EXTRACT POWDER

Farming in the 21st Century requires growers to produce more with less. Maintaining farm profits both now and in the future requires growers to select sustainable, low cost farm inputs that improve crop yields and quality in an uncertain climate. Acadian Seaweed Extract Powder is a renewable resource that is used in some of the most impoverished countries in the world under the most extreme growing conditions to produce high yielding, high quality crops.

Enhanced root growth & early plant establishment

Plants need a good root system for the uptake of water and essential nutrients and for anchoring the plant against wind damage and soil erosion. Acadian extract powder induces plants to produce their own natural growth hormones that initiate root branching and elongation leading to an expansive and resilient root system.

Early and rapid root growth allows plants to access moisture and nutrients faster and more efficiently, speeding up plant establishment. Faster growing plants means you are harvesting sooner and using less water and nutrients to get the crop to market. The shorter time the crop sits in the field, the lower the risk of crop damage from pests, diseases, weed competition and severe weather events.

Water & fertiliser use efficiency saves money

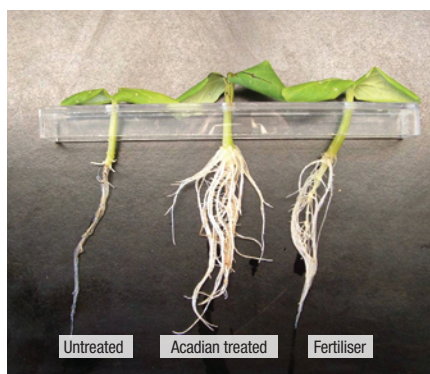
Water and fertilizers are becoming two of the major production costs in modern farming. Plants that use water and fertiliser more efficiently are a cost saving to growers. Plants treated with Acadian extract powder utilise moisture and nutrients more rapidly and efficiently before it evaporates, volatilizes, leaches away or becomes locked up in the soil. Less waste means more profit.

Stress resistance – Less stress, less waste, more productivity

Plant stress is a major factor in lost productivity. When plants suffer stress they shut down their respiration and metabolism. Plants that are not actively growing are costing you money in terms of wasted water and nutrients and other potential losses associated with the crop being in the field longer. Plant stress slows crop development causing uneven sizing and ripening, leading to increased harvesting costs and crop quality losses. Acadian extract powder reduces plant stress by enhancing the plant's production of stress relieving compounds (antioxidants). Acadian extract treated plants remain actively growing for longer and more active plant growth leads to greater productivity.

Soil fertility – Fertile soils are productive soils

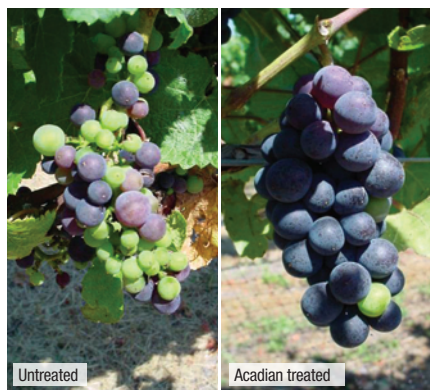
If we are going to meet the future challenge of producing more food with less resources we need to sustainably enhance the fertility of our soils. Soil organic matter and carbon levels of Australian soils are some of the worst in the world. We can no longer simply dump high analysis fertilisers into our fragile soils and expect higher yields. Nutrient availability is directly linked to a healthy and diverse soil food web. Organic supplements like Acadian extract powder add valuable carbon, simple and complex carbohydrates and other essential nutrients that support healthy soil micro-organism biodiversity and nutrient cycling. Acadian also assists with the availability in the soil of other applied nutrients through the chelation effect of mannitol and alginic acid.



Root growth & early plant establishment of melons with Acadian.



Strawberry runners demonstrating faster plant development



Acadian treated grape vine: Bunch showing uniform berry size and ripening **Untreated grape vine:** Bunch showing uneven berry sizing and ripening

Acadian Analysis

Physical Data

Appearance	Brownish-Black Flakes
Odor	Marine Odor
Solubility in water	100%
pH*	10.0-10.5

Carbohydrates

Alginate Acid	12.0-18.0%
Mannitol	4.0-6.0%

Amino Acids

(total 4.4%)

Typical Analysis

Maximum Moisture	6.5%
Organic Matter	45.0-55.0%
Ash (Minerals)	45.0-55.0%
Organic Carbon (C)	19.6 -26.0%

Total Nitrogen (N)	0.8-1.5%	Sodium (Na)	3.0-5.0%
Available Phosphoric Acid (P ₂ O ₅)	1.0-2.0%	Boron (B)	75-150ppm
Soluble Potash (K₂O)	17.0-22.0%	Iron (Fe)	75-250ppm
Sulphur (S)	1.0-2.0%	Manganese (Mn)	5-20ppm
Magnesium (Mg)	0.2-0.5%	Copper (Cu)	1-5ppm
Calcium (Ca)	0.3-0.6%	Zinc (Zn)	25-50ppm

Fruit	Rate	Foliar or Soil Application Stages				Results expected
		1st	2nd	3rd	4th	
Apples, Pears	800g-1kg/ha	Green tip (tight cluster)	Pre-bloom/ pink bud	Early fruit formation	Cover Spray	<ul style="list-style-type: none"> Stronger fruit set Less impact from heat, moisture & cold stress More uniform crop Better fruit sizing Less culls Better colour Higher Brix Less insect & disease attack Less postharvest breakdown
Citrus	800g-1kg/ha	Early bloom	Petal fall	With Summer spray	With Winter spray	
Grapes*	800g-1kg/ha	At 20-30 cm cane	At 45-60 cm cane	Pre bloom	Berry set/ early shattering	
Stone Fruit	800g-1kg/ha	Pink or white Bud	Full bloom	Early fruit formation	3 weeks later	
Tree nuts	800g-1.4kg/ha	Post harvest	Pink tip/bud swell	Petal fall	Every mth or before & after stress	
Strawberries	800g-1kg/ha	Runner soak 2g/L	At planting	1st pre-bloom	1st fruit set then every 2wks	

* A more comprehensive application timing document is available for both wine grapes and table grapes - contact your local representative.

Vegetables	Dosage per Application: 500g-750g/HA	Foliar or Soil Application Stages			Results expected
		1st	2nd	3rd	
Beans, Peas		At 4-6 leaf stage	At first- pre bloom	At first pods	<ul style="list-style-type: none">• Reduced transplant shock• Bigger roots for faster seedling establishment• More uniform crop with less culls• Better coloured, fuller produce• Better Brix & TSS• Less impact from heat, moisture & cold stress• Less internal breakdown & better postharvest life• Less pests & diseases• Less impact from heat, moisture & cold stress• Better wear tolerance• Bigger more fibrous roots to cope with disease, nematode and insect attack
Carrots, Onions, Leeks, Turnips		2-3 weeks after emergence	At root enlargement	Every 10-14 days until harvest	
Broccoli, Cauliflower, Cabbage		At 4-6 true leaf stage	1-14 days later	At head initiation	
Sweet Corn		At 2-6 leaf stage	At 50-75 cm growth	Just prior to tasselling	
Cucumbers, Melons, Pumpkins		At first 4 true leaves	First pre-bloom	7-14 days later & within 2 days of each pick	
Eggplants, Capsicum, Melons, Squash		At 15-20 cm growth	Pre-bloom stage	At fruit set & then within 2 days of each pick	
Leafy Greens		At 4 leaf stage	Regularly, every 14 days		
Potatoes (seed treatment option)		At tuber set	10-14 days later	Early Bloom	
Tomatoes: Fresh market varieties		At 15-20 cm growth	At first pre-bloom	At first fruit set & every 14 days after each pick	
Hydroponics		Apply weekly at 250g/400m² for Tomato, Capsicum and Cucumbers. 250g/500m NFT leafy greens			
TURF 1-1.5kg/ha		Start foliar applications at initial growth stage and continue at 3-4 week intervals. Make additional applications after periods of stress or heavy use, to newly applied sod, and as a late season spray to help improve resistance to winterkill & frost damage.			

NOT ALL CROPS COULD BE REPRESENTED ON THIS SHEET. CONSULT YOUR LOCAL OCP AGRONOMIST FOR RATES AND APPLICATION STAGES FOR OTHER CROPS.