



A plant extract to improve plant health.

Active ingredient: Extract of *Reynoutria sachalinensis* 12 %
 Other ingredients: 88 %
 Total 100 %

EPA Reg. No. 84059-21

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
IF SWALLOWED:	Call poison control center 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control center 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 center or doctor for further treatment advice.
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 center or doctor for treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or if going for treatment. Contact the poison control center hotline at 1-800-222-1222; 24 hours a day, 7 days a week for emergency medical treatment information.	


**CAN BE USED
IN ORGANIC
PRODUCTION**

PACE_0120_0120_V2



LOT#: PRINTED ON CONTAINER

Manufactured by:

**Marrone®
Bio Innovations**
 1540 Drew Ave., Davis, CA 95618 USA
 info@marronebio.com

Marrone Bio Innovations name and logo are registered trademarks of Marrone Bio Innovations, Inc.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wear goggles or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks
- Waterproof gloves
- Protective eyewear

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENVIRONMENTAL HAZARDS

For terrestrial uses: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

(Use the following additional statement for containers that hold 5 gallons or more: Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.)

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its 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 State or Tribal 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 exemptions pertaining to the statements on this label about personal protective equipment (PPE) and the restricted-entry interval (REI). 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 4 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
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. The REI does not apply when this product is used for seed treatment at planting or in hopper box treatments.

GENERAL INFORMATION

PACESETTER™ is an extract from the plant *Reynoutria* spp. for use on ornamental plants, turf, and edible crops. PACESETTER™ applied to actively growing plants (see DIRECTIONS FOR USE) will improve plant health. Plant health benefits often result in greater yields at harvest, especially when crops are stressed by pathogens or environmental conditions.

PACESETTER™ can be used to promote healthy root growth.

MODE OF ACTION

The extract obtained from *Reynoutria sachalinensis* plant material contains bioactive compounds. In addition to foliar applications, PACESETTER™ can be used in multiple application methods as a plant dip, soil drench, in-furrow spray, or applied through drip irrigation to promote healthy root growth.

When applied at rates and timing for plant health effects, the improved plant defense responses minimize the impacts of stress resulting in optimized yields at harvest. Applying PACESETTER™ has been shown to increase leaf chlorophyll content and increase soluble protein content in some crops. These effects often lead to improved crop quality and/or yields.

MIXING AND APPLICATION INSTRUCTIONS – SHAKE WELL PRIOR TO USE –

PACESETTER™ is a micro-emulsion concentrate consisting of certain ingredients extracted from *Reynoutria* spp. Use 50–mesh nozzle screens or larger.

See **AERIAL APPLICATION** section for aerial application use directions.

See **SOIL TREATMENT** section for soil application use directions.

Use higher water volumes with larger sized crops and extensive foliage to obtain thorough coverage.

PACESETTER™ + tank-mixtures: Add 1/2–3/4 of the required amount of water to the mix tank. Start the agitation before adding any tank mix ingredients. In general, tank-mix ingredients should be added in this order: wettable powders, dry flowable formulations, liquid flowable formulations, and emulsifiable formulations such as PACESETTER™. Always allow each tank-mix ingredient to become completely dispersed before adding the next component. Maintain continuous agitation until all components have been dispersed and throughout the application process. After all components are completely dispersed add the remainder of the water. PACESETTER™ cannot be mixed with another product with a prohibition against mixing. Use of the tank mix must be in accordance with the most restrictive label limitations and precautions. **Do not pre-mix PACESETTER™ with any other tank mix component prior to adding to the spray tank.**

Compatibility: Do not combine PACESETTER™ in the spray tank with pesticides, adjuvants, or fertilizers if there has been no previous experience or use of the combination to show it is physically compatible, effective, and non-injurious under your use conditions. Electrostatic sprayers have not been tested to demonstrate successful application and maintain product efficacy.

PACESETTER™ is compatible with many commonly used pesticides, fertilizers, adjuvants, and surfactants, but has not been evaluated with all potential combinations. To ensure compatibility of the tank mix combinations, evaluate prior to use as follows: Using a suitable container, add the proportional amounts of product to water. Add wettable powders first, then water dispersible granules, then liquid flowables, and lastly, emulsifiable concentrates. Mix thoroughly and let stand for at least five minutes. If the combination stays mixed or can be remixed, it is physically compatible. Test the mix on a small portion of the crop to be treated to ensure that a phytotoxic response will not occur as a result of the application.

6.5 - 13 fluid ounces per acre for FOLIAR (GROUND) applications

For ground applications to maximize yields, apply this product at 6.5 – 13 fluid ounces in 10–40 gallons of water per acre using sufficient volume for thorough coverage. Increase water volume as plant size increases. For improved performance, use this product in a tank mix with other registered fungicides.

6.5 - 13 fluid ounces per acre for FOLIAR (AERIAL) applications

For improved performance, use this product in a tank mix with other registered fungicides.

AERIAL APPLICATION INSTRUCTIONS

Apply PACESETTER™ by aerial application to the Crops listed in this label at the rate of 6.5 - 13 fluid ounces per acre in a minimum of 3 gallons of water per acre. Increasing the amount of water applied per acre will improve product performance. Follow all instructions to reduce aerial drift.

AERIAL DRIFT REDUCTION ADVISORY INFORMATION

GENERAL: Avoiding spray drift at the application site is the responsibility of the applicator. The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator and the grower are responsible for considering all these factors when making decisions. Where states have more stringent regulations, they should be observed. Note: This section is advisory in nature and does not supersede the mandatory label requirements.

INFORMATION ON DROPLET SIZE: The most effective way to reduce drift potential is to apply large droplets. The best drift management strategy is to apply droplets large enough to provide sufficient coverage and control. Applying larger droplets reduces drift potential but will not prevent drift if applications are made improperly, or under unfavorable environmental conditions (see Wind, Temperature and Humidity, and Temperature Inversions).

CONTROLLING DROPLET SIZE: Use high flow rate nozzles to apply the highest practical spray volume. Nozzles with higher rated flows produce larger droplets. Pressure – Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When high flow rates are needed, use higher flow rate nozzles instead of increasing pressure. Number of Nozzles – Use the minimum number of nozzles that provide uniform coverage. Nozzle Orientation – Orienting nozzles so that the spray is released parallel to the airstream produces larger droplets than other orientations and is the recommended practice. Significant deflection from horizontal will reduce droplet size and increase drift potential. Nozzle Type – Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low-drift nozzles. Solid stream nozzles oriented straight back produce the largest droplets and the lowest drift.

BOOM WIDTH: For aerial applications, the boom width must not exceed 75% of the wingspan or 90% of the rotary blade. Use upwind swath displacement and apply only when wind speed is 3–10 mph as measured by an anemometer. Use medium or coarser spray according to ASAE 572 definition for standard nozzles or VMD for spinning atomizer nozzles. If application includes a no-spray zone, do not release spray at a height greater than 10 feet above the ground or crop canopy.

APPLICATION HEIGHT: Do not make application at a height greater than 10 feet above the top of the largest plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

SWATH ADJUSTMENT: When applications are made with a crosswind, the swath will be displaced downward. Therefore, on the up and downwind edges of the field, the applicator must compensate for this displacement by adjusting the path of the aircraft upwind. Swath adjustment distance should increase with increasing drift potential (higher wind, smaller drops, etc.).

WIND: Drift potential is lowest between wind speeds of 2–10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph due to variable wind direction and high inversion potential. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

TEMPERATURE AND HUMIDITY: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

TEMPERATURE INVERSIONS: Do not apply during a temperature inversion because drift potential is high. Temperature inversions restrict vertical air mixing, which causes small, suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

SENSITIVE AREAS: The pesticide should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, non-target crops) is minimal (e.g. when wind is blowing away from the sensitive areas). Do not allow spray to drift from the application site and contact people, structures people occupy at any time and the associated property, parks and recreation areas, non-target crops, aquatic and wetland areas, woodlands, pastures, rangelands, or animals.

SOIL TREATMENT USE DIRECTIONS

In-Furrow Applications:

At planting, apply PACESETTER™ as an in-furrow spray at the rate of 6.5 – 26 fluid ounces per acre or 0.37 - 1.99 fluid ounces (10.9 - 58.9 mL) per 1000 feet of row according to the chart below. Apply PACESETTER™ in 5–15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.

6.5 - 26 fl. oz. per acre or 0.4 - 2 fl. oz. (11 - 59 mL) per 1000 ft. row for IN-FURROW applications

- For in-furrow applications, at planting apply this product as an in-furrow spray at the rate of 6.5 - 26 fluid ounces per acre or 0.4 - 2 fl. oz. (11 - 59 mL) per 1000 feet of row according to the chart in the SOIL TREATMENT USE DIRECTIONS section. Apply this product in 5–15 gallons of water so as the spray is directed into the seed furrow just before the seeds are covered.

Fluid ounces of PACESETTER™ per 1000 row feet

Fluid ounces per acre	30" rows	32" rows	34" rows	36" rows	38" rows	40" rows
6.5	0.4	0.4	0.4	0.4	0.5	0.5
13	0.7	0.8	0.8	0.9	0.9	1
26	1.5	1.6	1.7	1.8	1.9	2

30" = 17,424 row ft./acre, 32" = 16,315 row ft./acre, 34" = 15,374 row ft./acre,

36" = 14,520 row ft./acre, 38" = 13,754 row ft./acre, 40" = 13,068 row ft./acre.

APPLICATION RATES FOR SELECTED CROPS

When used as directed PACESETTER™ will improve plant health.

Pre-harvest Interval (PHI) = 0 days

SUGAR BEETS (includes crop for seed production)

LEGUME VEGETABLES, succulent or dried (not including soybeans and peanuts): Chickpeas, Dry Beans, Garbanzo Beans, Lentils, Lima Beans, Split Peas (including those grown for seed or oil production)

SOYBEAN

CEREAL GRAINS: Barley, Buckwheat, Grain Amaranth, Milo, Oat, Millets, Rice, Rye, Sorghum (sweet sorghum and other varieties), Triticale, Wheat and other cereal grains

CORN: Sweet Corn, Field Corn, Popcorn, Silage Corn, Seed Corn

FORAGE, FODDER AND STRAW OF CEREAL GRAINS: Corn, Wheat, and any other cereal grain crop

GRASS FORAGE, FODDER, AND HAY: Bermuda grass, Bluegrass, Bromegrass, Fescue, Pasture and range grasses grown for hay or silage, Sudangrass, Timothy, and other grass forage, fodder, and hay

NON-GRASS ANIMAL FEED: Alfalfa, Clover, Kudzu, Lespedeza, Lupin, Sainfoin, Trefoil, Vetch, and other non-grass animal feed

OIL SEED CROPS (not including cotton, peanut, or soybean): Canola, Castor, Flax, Jojoba, Rapeseed, Safflower, Sesame, Sunflower, and other oil seeds

COTTON

PEANUT

SUGARCANE

SWITCHGRASS, MISCANTHUS

INTEGRATED PEST MANAGEMENT (IPM)

Many conventional fungicides have been tested in an IPM regime with PACESETTER™ with very satisfactory results. One of the major objectives of IPM has been to reduce the probability of disease resistance development to a particular active ingredient.

The use of tank mixes with a conventional fungicide has been successful.

Follow label instructions of the particular registered product: Do not exceed amounts or treatment intervals on the label.

STORAGE AND DISPOSAL

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

Pesticide Storage: Store in a cool, dry place. Avoid freezing.

Pesticide Disposal: To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry).

Container Handling (under 5 gallons): Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

Container Handling (over 5 gallons): Non-refillable container. Do not reuse or refill this container Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill or by incineration. Do not burn unless allowed by state and local ordinances.

Marrone Bio Innovations is a member of the Ag Container Recycling Council. Visit <http://www.acrecycle.org/contact.html> for information on how to arrange pick-up of this empty pesticide container.



WARRANTY

To the extent consistent with applicable law, the seller makes no warranty, expressed or implied, of merchantability, fitness or otherwise concerning use of this product. To the extent permitted by the applicable law, the user assumes all risks of use, storage or handling that are not in strict accordance with the accompanying directions.

Made in the U.S.A.

US Patents No. 4,863,734 and No. 5,989,429

PACESETTER™ is a trademark of Marrone Bio Innovations, Inc.

Marrone Bio Innovations' name and logo are registered trademarks of Marrone Bio Innovations, Inc.

© **Marrone Bio Innovations, Inc.**

1540 Drew Ave., Davis, CA 95618

1-877-664-4476

www.marronebio.com

info@marronebio.com

LOT # printed on container



A plant extract to improve plant health.

Active ingredient: Extract of *Reynoutria sachalinensis* 12 %
 Other ingredients:88 %
 Total 100 %

EPA Reg. No. 84059-21

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
IF SWALLOWED:	Call poison control center 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person.
IF ON SKIN OR CLOTHING:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call a poison control center 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 center or doctor for further treatment advice.
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 center or doctor for treatment advice.
HOTLINE NUMBER	
Have the product container or label with you when calling a poison control center or doctor, or if going for treatment. Contact the poison control center hotline at 1-800-222-1222; 24 hours a day, 7 days a week for emergency medical treatment information.	


**CAN BE USED
IN ORGANIC
PRODUCTION**

PACE_0120_0120_V2



LOT#: PRINTED ON CONTAINER

Manufactured by:
 **Marrone[®]
Bio Innovations**
 1540 Drew Ave., Davis, CA 95618 USA
 info@marronebio.com

Marrone Bio Innovations name and logo are registered trademarks of Marrone Bio Innovations, Inc.

- EPA Est. No. 085970-FL-001
- EPA Est. No. 084059-MI-001

NET CONTENTS:

- 1 Pint
- 1 Quart
- 1 Gallon
- 2.5 Gallon
- 5 Gallon
- 55 Gallon Drum
- 265 Gallon Tote

PF-166108

PULL HERE TO OPEN ▲

PN 61715