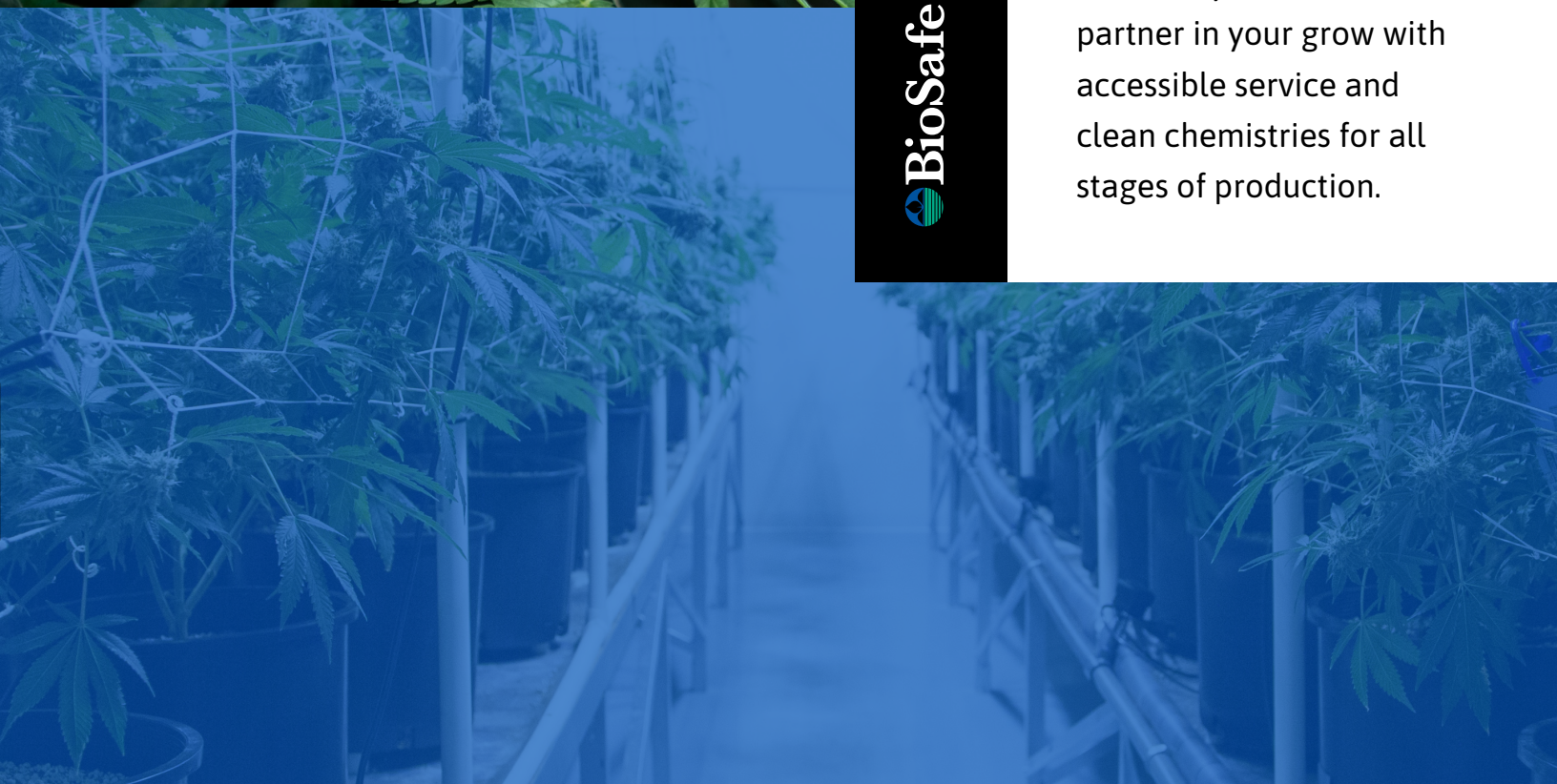
BioSafe Systems

CANNABIS
Crop Protection

BioSafe Systems is a true partner in your grow with accessible service and clean chemistries for all stages of production.



Propagation

CUTTING DISINFECTION – DIP

Apply **15 mL (0.5 fl. oz.) ZeroTol 2.0** per 1 gallon of water (1:250).

Immerse cuttings for 45 seconds. Remove cuttings and allow to drain and air dry (do not rinse).

DISINFECTION – DRENCH

Apply **15 mL ZeroTol 2.0** per 1 gallon of water.

Apply until point of saturation (test the pH of the solution and buffer as needed). Allow solution to drain through media and wait at least 15 minutes prior to adding any products, planting, or watering.

IMPROVE PLANT VIGOR

Apply **3 oz. TerraGrow** per 10 gallons of water.

Drench or immerse media prior to placing cuttings into media (rooting hormone may be added to cuttings prior to planting).

MITIGATE ALGAE AND CONTROL PLANT PATHOGENS

Apply **15 mL ZeroTol 2.0** per 1 gallon of water as an over-the-top spray.

For best results, apply over the cuttings as a light mist and avoid soaking the propagation media (over saturation can cause the TerraGrow to become nonviable).

TerraGrow®

Use TerraGrow as soil or media drench to maintain beneficial microbe population levels and ensure nutrient availability benefits throughout vegetative and flowering growth stages.

In soilless media (rockwool or coco-based), apply **0.5 gram TerraGrow** per 1 gallon of water on a weekly basis. In soil media, use **1 gram TerraGrow** per 1 gallon of water bi-weekly.

TerraGrow can be applied with fertilizers (maintain pH of solution at 6–7 for best results). For ideal performance, mix and use solution within 24 hours. Do not store or reuse solution after 24 hours.

REDUCE TRANSPLANT SHOCK

Drench **4–6 oz. TerraGrow** per 10 gallons of water.

Vegetative Week 1

MON Tank mix **4 mL AzaGuard® + 13 mL ZeroTol® 2.0 + 13 mL OxiPhos® + 4 mL CalOx® FT** per 1 gallon of water as a foliar spray

For best performance, ensure thorough coverage of plant tissue by using at least 1 gallon of solution per 400 sq. ft. up to 12" crop height. (Increase solution by 1 gallon for every additional 12" of crop height.)

TUE Cloning and plant work

WED Apply **9 grams BioCeres WP** per 1 gallon of water per 400 sq. ft.

Add 1 gallon of solution per 400 sq. ft. for each 12" of growth.

THU Plant work and scouting

FRI Rotate soap, sulfur, or citric acid as needed

SAT Plant work and record progress

SUN Allow plants to rest

MOTHER PLANTS

It is recommended to use Vegetative Week 1 spray program for mother plants before taking cuttings.

Vegetative Week 2

MON Tank mix **4 mL AzaGuard + 13 mL ZeroTol 2.0** per 1 gallon of water as a foliar spray

TUE Cloning and plant work

WED Apply **9 grams BioCeres WP** per 1 gallon of water per 400 sq. ft.

THU Plant work and scouting

FRI Rotate soap, sulfur, or citric acid as needed

SAT Plant work and record progress

SUN Allow plants to rest

Vegetative Week 3

MON Tank mix **4 mL AzaGuard + 4 mL CalOx FT** per 1 gallon of water as a foliar spray

TUE Cloning and plant work

WED Apply **9 grams BioCeres WP** per 1 gallon of water per 400 sq. ft.

THU Plant work and scouting

FRI Rotate soap, sulfur, or citric acid as needed

SAT Plant work and record progress

SUN Allow plants to rest

Vegetative Week 4

MON Tank mix **4 mL AzaGuard + 13 mL ZeroTol 2.0 + 13 mL OxiPhos** per 1 gallon of water as a foliar spray

For best performance, ensure thorough coverage of plant tissue by using at least 1 gallon of solution per 400 sq. ft. up to 12" crop height. (Increase solution by 1 gallon for every additional 12" of crop height.)

TUE Cloning and plant work

WED Apply **9 grams BioCeres WP** per 1 gallon of water per 400 sq. ft.

THU Plant work and scouting

FRI Rotate soap, sulfur, or citric acid as needed

SAT Plant work and record progress

SUN Allow plants to rest

For additional vegetative weeks, refer to weeks 3 and 4.

Flowering Weeks 1–3

Omit OxiPhos from tank-mix on Week 2.

MON Tank mix **4 mL AzaGuard + 13 mL ZeroTol 2.0 + 13 mL OxiPhos** per 1 gallon of water as a foliar spray

Increase solution by 1 gallon for every additional 12" of crop height.

TUE Cloning and plant work

WED Apply bioinsecticide as needed

THU Plant work and scouting

FRI Rotate soap, sulfur, or citric acid as needed

SAT Plant work and record progress

SUN Allow plants to rest

Flowering Weeks 4–7

On week 6 apply ZeroTol 2.0 at 13 mL + 13 mL OxiPhos per 1 gallon of water.

Apply **15–37 mL ZeroTol 2.0** per 1 gallon of water (1:250–1:100) (use at least 2 gallons of solution per 400 sq. ft.).

It is recommend to use a non-ionic surfactant with ZeroTol 2.0 to improve contact within bud. For best results, ensure thorough coverage of all plant tissue.

Follow applications of ZeroTol 2.0 with a biofungicide to protect against plant diseases, such as botrytis. An application of a biofungicide can be made no less than 1 hour after any ZeroTol 2.0 spray.

Flowering Weeks 8–9

Apply **15–37 mL ZeroTol 2.0** per 1 gallon of water. Use at least 4 gallons of solution per 400 sq. ft.

Preharvest Disinfestion Spray

Apply **37 mL ZeroTol 2.0** per 1 gallon of water (1:100).

Notes

FLOWERING WEEKS 3–8

The use of beneficial organisms can be highly advantageous for your crop protection program. Starting during the third week, you can begin introducing beneficial organisms, as needed. If the growing operation has low relative humidity and a warm environment, then introduce the following predatory mites: californicus, swirskii, and persimilis. If growing operation has a cool environment with a relative humidity above 50%, then introduce the following predatory mites: fallacis, cucumeris, and persimilis. The predatory mite, andersoni, is viable in varying humidity, but it should only be released as a preventative measure. For aphid management, releasing green lacewing (*Chrysoperla rufilabris*) and the parasitic wasp, *Aphidius colemani*, can significantly improve control. Beneficial nematodes can be used to control fungus gnats and thrips in the soil (for best results, they should be watered in weekly).

CROP PROTECTION

- AzaGuard can be used as a soil or media drench to treat root aphids and fungus gnats.
- AzaGuard and BioCeres WP can be used throughout flowering as needed to control pests.
- Due to potential incompatibility issues, it is not recommended that you tank-mix ZeroTol 2.0 or SaniDate 5.0 with biopesticides (living organisms, including but not limited to bacterium, fungus, spores, spent fermented media, virus, protozoan, nematodes).
- Do not use any surfactants when using AzaGuard in a tank-mix solution.
- It is recommended to spray early in the day with the lights off.
- **Do not** use RO water for foliar sprays.

INSTAGRAM
@biosafe_systems

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This application program is not meant to replace full product labels. Labels for products mentioned contain important safety precautions, detailed applications, guidelines and more. Always read and follow label directions.

Cannabis is not a federally approved crop. Please consult your state's regulations for use of these products.

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