



APPLICATION GUIDE

Revitalizes soil conditions, improves plant growth, and encourages nutrient uptake

SHAC *Revitagro*™ contains oxidized lignite from one of the highest quality sources of humic materials in North America. These humic and fulvic compounds are essential for a healthy and productive soil environment.



Revitagro™ Benefits:

- Improves water retention in soil and drought resistance in plants
- Increases retention of nutrients in the soil
- Limits the effects of salinity in affected regions
- Environmentally friendly and safe to use
- CFIA-registered soil amendment (Registration number 2106128A Fertilizers Act)

SHAC *Revitagro*™ is designed for:

- Horticultural land
- Acreages
- Yards and gardens
- Golf courses
- Greenhouses
- Compost

RECOMMENDATIONS

Revitagro™ is not a fertilizer or plant food. *Revitagro*™ works best when applied with a minimum amount of balanced fertilizer, ensuring that fertilizer application instructions are carefully followed. Periodic soil testing is recommended. If you have concerns about the physical compatibility of a fertilizer product with *Revitagro*™, a jar test is recommended. Do not mix this product with herbicides or pesticides without first determining that the products are compatible. Humic acids may increase efficiency of glyphosate. If unsure, apply herbicides/pesticide products separately from *Revitagro*™. For applications made by turf-care professionals (or other specialized applications), the product distributor may be contacted for site-specific application instructions. Do not apply or mix with chemicals. Do not allow product to freeze. Do not over-apply this product (or other products when using *Revitagro*™).



For more information on Shac *Revitagro* scan QR Code

APPLICATION RATES:

Before each use invert jug and shake well (or agitate drum) to loosen sediment on the bottom. Dilute product with water prior to application in order to achieve even coverage. Screening/straining of product will be necessary for any spray applications. When manufactured the *Revitagro*TM product is run through a 100 mesh screen but being a natural growth stimulant microbial growth may occur in the container.

SMALL-SCALE APPLICATION RATES

Application	Directions for Use
Lawn or Turf	Apply 500 ml (16.5 oz.) <i>Revitagro</i> TM per 230 m ² (2500 ft ²). Dilute with water and apply as desired to achieve the required coverage. Apply prior to regular fertilizer applications in the spring, summer and fall.
Greenhouses	Every 4 weeks during growing season, apply 175 ml (6 oz.) <i>Revitagro</i> TM to the existing irrigation system, diluted in a minimum of 20 L (6 US gals) of water per 370 m ² (4000 ft ²).
Plants/Shrubs/Gardens and Foliar Applications	Dilute 5 ml (1 tsp) <i>Revitagro</i> TM in 1 L (1 qt.) water and apply as a watering solution. For foliar applications, spray on plants and surrounding soil enough to dampen but not cause dripping. Apply every 4 weeks during growing season.
Compost	Mix 250 ml <i>Revitagro</i> TM in 1.25L of water (1 to 5 ratio) per 5 cubic ft. of compost material. Pour directly onto compost pile, ensuring even coverage. Apply maintenance rate (at 1:5 dilution) when new material is added to pile. Apply enough diluted <i>Revitagro</i> to moisten surface of fresh material.

*Revitagro*TM may be applied using a portable tank sprayer to achieve even coverage. If using a hose-end spray applicator, fill canister with required amount of partially diluted *Revitagro*TM, and spray consistently to achieve even coverage. If applying with sprayers containing high mesh screens (>100 mesh), remove screens prior to product use.

LARGE-SCALE (AGRICULTURAL/HORTICULTURAL) APPLICATIONS

Application	Directions for Use
Agricultural Land	Apply 1-2 L (1-2 qt.) <i>Revitagro</i> TM per 2000 m ² (½ acre). Dilute with water and apply as desired to achieve the required coverage. A suggested dilution rate of 1 L (1 qt.) per 100 – 210 L (25 to 55 US gals) may be used as a guideline. A higher dilution rate (1L per 210 L) should be used for foliar applications. The product may be applied as often as every 8 weeks during the growing season, or as recommended by a site-specific pre-application assessment.
Commercial Greenhouses	Apply 500 ml (1/2 qt.) <i>Revitagro</i> TM to the existing irrigation system, diluted in a minimum of 60 L (16 US gals) of water per 925 m ² (10000 ft ²). Apply every 4 weeks during growing season.

*Revitagro*TM may be applied using the existing irrigation system or a tank sprayer to achieve even coverage. If using a hose-end spray applicator, fill canister with required amount of partially diluted *Revitagro*TM, and spray consistently to achieve even coverage. If applying with sprayers containing high mesh screens (>100 mesh), remove screens prior to product use.

CFIA Registration

SHAC *Revitagro*TM (Reg #2013128A)



HELPFUL HINTS FOR SUCCESSFUL COMPOSTING:

- Try to achieve a 50/50 balance of "green" material (i.e. high nitrogen material such as grass clippings, vegetable peelings, manure) and "brown" material (i.e. high carbon material such as dried leaves and grass clippings, straw).
- A shovel full of soil in the bottom of the composter will supply helpful microorganisms for composting.
- Moisture is vital! Compost material should be kept **moist** but not too wet. When you squeeze a handful of compost pile material, it should be spongy but not dripping.

Troubleshooting for Composting ...

Symptom	Problem	Solution
The compost has a bad odor.	<ul style="list-style-type: none"> • Not enough air. 	<ul style="list-style-type: none"> • Turn (mix) the pile.
The compost smells like ammonia.	<ul style="list-style-type: none"> • Too wet. • Ammonia smell - usually means too much fresh green material. • Material is too compact. 	<ul style="list-style-type: none"> • Add fresh dry material and turn to mix thoroughly. • Add more brown dry material and mix pile thoroughly. • Loosen the compost and add moisture while turning.
The pile center is dry or white mold is present.	<ul style="list-style-type: none"> • Not enough water. 	<ul style="list-style-type: none"> • Moisten pile with water and SHAC MD and turn it.
The pile is sweet smelling but will not heat up.	<ul style="list-style-type: none"> • Lack of nitrogen in pile. 	<ul style="list-style-type: none"> • Mix in nitrogen source (green material).
The pile is damp in the middle, but dry everywhere else.	<ul style="list-style-type: none"> • Pile is too small or too dry. 	<ul style="list-style-type: none"> • Collect more material (both green and brown); moisten with SHAC MD and water.
Rodents / Vermin in pile.	<ul style="list-style-type: none"> • Meat or fatty food scraps added to pile attract rodents and vermin. 	<ul style="list-style-type: none"> • Cover each addition of food scraps with a layer of compost and place bin on a fine wire mesh.
High pile temperature (+140°F / 60°C).	<ul style="list-style-type: none"> • Pile too large. • Insufficient ventilation. 	<ul style="list-style-type: none"> • Reduce pile size. • Turn pile.
Cold weather.	<ul style="list-style-type: none"> • Slows pile activity; potential cooling/freezing of pile. 	<ul style="list-style-type: none"> • Increase pile size and/or insulate with straw.
Pile will not heat up.	<ul style="list-style-type: none"> • Needs more air. 	<ul style="list-style-type: none"> • Turn pile.

FAQ's

Q. Can Revitagro™ be used for remediation of contaminated soil?

A. Revitagro™ may be used in certain situations to aid in remediation of contaminated soils. Research has shown that remediation efforts at sites contaminated with hydrocarbons and/or heavy metals have been significantly improved by the addition of humic substances. Product specific research conducted on contaminated oilfield soil has yielded excellent results with Revitagro treatment. Please contact the SHAC Technical Department for further information.

Q. Can Revitagro™ be used in compost?

A. Yes, Revitagro™ contains an ideal carbon/nitrogen ratio for compost applications and will aid in odour control and decomposition of organic material. For manure compost systems, please refer to SHAC Manure Digester product information.

Q. Why do some liquid humic products contain 10-12% humic acids and have a high pH, while Revitagro™ contains only 4-6% humic acids and has a low pH?

A. Revitagro™ is a hydrogen-bound humic acid product. Most commercially available humic acid products are humates (metal salts of humic acids), which means that the humic acids are extracted using an alkaline compound. Revitagro™ is unique in that no alkaline extractants are used during manufacture. Revitagro™ contains both humic and fulvic acids and retains its naturally acidic form with a pH of 3. By manufacturing the product without alkaline extractants, the maximum exchange capacity of the material is preserved, and the weak hydrogen bonds allows for exceptional ion exchange potential. If Revitagro™ were to contain higher rates of humic material at a low pH, the product would become intractable and difficult to suspend during use. Therefore, the product has been formulated in such a way to allow for the highest concentration of humic and fulvic acids while maintaining the acidity.

Q. Why should screens be removed prior to adding Revitagro to mix tank for spraying?

A. Revitagro™ contains a fine suspension of humic acids as well as dissolved fulvic acids. The fine suspended particles may become compacted in the bottle and must be well agitated prior to mixing. In order to reduce problems with clogging, screens should be removed prior to spraying. Jar testing and spot testing should be performed if other products/chemicals are present in the mix tank. In some cases, users may wish to strain the product prior to use in sprayers.

Q. What is the cause of the growth within some bottles/drums?

A. Some bottles or drums of product may contain a minimal amount of growth. This is due to the product acting as a biostimulant. The growth has been tested and found to be benign in nature. Straining of the product using a mesh strainer or cheesecloth should be conducted to remove any surface growth to reduce potential for clogging of application equipment.

Q. Is Revitagro™ safe for animals and fish?

A. Revitagro™ is very safe to use and has been tested non-toxic for fish at above recommended rates. There are no special safety precautions or equipment required. The product is intended to restore soil balance and mitigate environmental pollutants.