



Products Information

Bison Soil Organic Biochar for Vineyards



Bison Soil Organic Biochar Maintained Health of Vines and Increased Grape Quality

Maintaining the health of vines, ensuring quality of grapes and increasing the production of grapes are desirable characteristics for vineyards. Suppression of parasites would be an added bonus.

Studies in Europe indicate that biochar additions to soils can have a positive outcome on the vineyard. In a 2010 study at the Delinat Institute for Ecology and Climate Change, investigators working with the Pinot Noir grape in Switzerland found that the additions of biochar to soils resulted in the following: 1) greater growth of vines as indicated by increased nitrogen content of the plant and increased symbiosis with soil microbes; 2) up to 30% greater amino acid levels in grapes which means food for yeast in fermentation and greater resistance to parasites; and 3) a 10% increase in phenolic content which means better grape quality and taste and more antioxidants.

In a continuation of the study in 2011, the Swiss location continued to do well with additions of biochar, however, locations in Spain, France and Italy suffered because of poor soil nutrition. It is important that proper fertilization occur when adding biochar. Given correct fertilization, additions of biochar are positive.

Description of Bison Soil Organic Biochar

Bison Soil Organic Biochar for the wine industry is sold by Bison Soil and optimized for superior performance to enhance plant growth by retaining nutrients and water; improving soil physical, chemical and biological properties; enhancing crop growth with less agronomic inputs; increasing beneficial microbial colonization; and suppressing disease. This Bison Soil Organic Biochar is manufactured from clean wood biomass to maximize its ability to improve soils and fruit production.

Bison Soil Organic Biochar lasts for hundreds of years, so it stays in the soil providing benefits for vines for years and years. Bison Soil Organic Biochar is not only good for vineyards, but it is also good for the planet because it is a natural, USDA Certified Biobased soil amendment that is derived from plant biomass that would otherwise be a waste product in a landfill.

Application Rates for Bison Soil Organic Biochar

With its ability to improve soil, plant health and grape quality, Bison Soil Organic Biochar is ideally suited for use in vineyards. The rates below are based on research and provide general guidance for the use of Bison Soil Organic Biochar. Studies are underway to determine ideal concentrations and it appears that a 1-3% (w/w) will be effective for vineyards.

These are typical application rates, and rates for a given situation depend on the soil type and condition. We thus suggest that trials be conducted with your specific soil and vines to determine the best Bison Soil Organic Biochar concentrations.

Bison Soil Organic Biochar can be applied to rows of vines, either when they are first planted or biochar can be worked into the soil around each existing plant. Adding 1-3% (w/w) requires approximately 8.5 to 26 cubic feet, respectively, of Bison Soil Organic Biochar applied to rows per acre. This is equivalent to approximately 154 to 465 lbs of Bison Soil Organic Biochar.