

Nutrient Management and Nutrient Recovery Thematic Network www.nutriman.net

EIP-AGRI practice abstract

Short title:

High nutrient dense Bio-Phosphate products recovered from food grade animal bone grist with over 30% P2O5 content by "3R zero emission pyrolysis" process

Summary:

The Animal Bone Char (ABC) Bio-Phosphate is a controlled release natural bio-fertiliser with macroporosus structure and calcium-phosphate bio-based mineral (apatite) content. It is made from food grade bone grist and mono feed processed by the 3R (Recycle-Reuse-Reduce) zero emission pyrolysis phosphorus recovery technology. The product contains economically high concentrated phosphorus (>30% P2O5) and calcium (>37%) that is processed and formulated to be available for plants, which allows efficient, environmentally safe and renewable phosphorus supply at industrial scale. This innovative bio-fertiliser is formulated to any BIO-NPK-C compounds and microbiological adaptations as of user demand for organic and low input farming applications. The user benefits are wide ranged and combined with multiple effects, including fertilisation, soil improvement and support of plant natural resistance. The product is bio, safe, lawful and economical with high market demand. The ABC Bio-Phosphate product is proven through field demonstration with validated agronomical effects: increasing yields by >10% and improving fruit quality. Several successful field tests are made under different climatic and soil conditions. Implementation in large industrial scale will be available from 2021. Recommended doses are 0.2-1.5 t/ha with primarily fertilization for added value food crop cultivations, such as vegetables, fruits, rice, grapes, tobacco, medicinal plants and herbs. The ABC Bio-Phosphate product is already EU Authority permitted (6300/13393/2-2019) for lawful marketing as of (EU)515/2019 and fully meet the (EU)1009/2019 as well.

For more information: https://nutriman.net/farmer-platform/product/id_192

