Verde's N Keeper® Technology To Boost Agricultural Productivity And Help Fight Climate Change

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Verde AgriTech Plc (TSX: "NPK") (OTCQB: "AMHPF") ("Verde" or the "Company") is pleased to announce the launch of N Keeper®, a proprietary processing technology for glauconitic siltstone that alters its physical-chemical properties to enable ammonia retention for use as a calibrated additive in Nitrogen fertilizers. This combination is responsible for the reduction of Nitrogen volatilization loss, allowing more agronomic efficiency for farmers and contributing to the reduction of the global warming impacts caused by Nitrogen fertilizers manufacturing and application.

Nitrogen Fertilizers Impacts

Nitrogen is part of the NPK triad (Nitrogen, Phosphorus and Potassium) that make up the vital macronutrients for plants. The main source of Nitrogen in Brazilian agriculture is urea, mainly due to its low cost, when compared to other sources.

Traditionally, the production of synthetic Nitrogen fertilizers is a significant source of greenhouse gas ("GHG") emissions. The GHG are generated from the fossil fuel mining and transportation, the ammonia synthesis and its conversion into various Nitrogen fertilizer products.[1] Moreover, the application of synthetic Nitrogen fertilizers is recognized as the most important factor contributing to direct nitrous oxide ("N_2O") emissions from agricultural soils.[2,3] Studies report that up to 75% of the total GHG emission in crop production stemmed from the use of Nitrogen fertilizers.[4] This finding is particularly relevant because N_2O is a potent GHG, with a 298 higher global warming potential over a 100-year timeframe than carbon dioxide ("CO_2").[5]

Despite the use of urea as the most common Nitrogen source in agriculture, it has low use efficiency under field conditions due to its high susceptibility to losses, mostly caused by the ammonia ("NH_3") volatilization[6].

Verde Introduces N Keeper®

Verde observed an opportunity that led to the development of a technology with the purpose of mitigating reactions and loss processes, thus increasing the agronomic efficiency for the use of urea in agricultural systems and optimizing Nitrogen fertilization: N Keeper®.

The conception of the N Keeper® technology came from studies carried out by the Company, scientifically determining the most efficient outcome. An independent research concluded that the use of Verde's multinutrient potassium fertilizer, marketed and sold in Brazil under the K Forte® brand and internationally as Super Greensand® (the "Product"), processed with the N Keeper® technology, showed a potential to reduce relative ammonia volatilization between 10% to 27%, depending on the proportion of Product employed, when compared to conventional regular use of urea without any of it.

That is possible due to the proprietary processing technology of the material, which is carried out in Verde's facilities and allows the enhancement of its feedstock's natural characteristics. N Keeper® accentuates the negative correlations in the glauconite grains, identified by electron micro spread dispersive energy spectrometer in an electronic microprobe, indicating cationic substitutions giving to the mineral the characteristics of an anion. These unbalanced anions allow cationic exchanges between the potassium present in interlayers of glauconite with ammonium ($NH4^+$) ions present in the soil. Therefore, N Keeper® provides a high capacity of ammonia retention, leading to the reduction of Nitrogen volatilization loss.

"By drastically reducing the volatilized Nitrogen from urea, N Keeper® guarantees an increase in the efficiency of crop fertilization. As importantly, with low environmental impact and low costs for farmers, N Keeper® represents an important advance of agricultural technologies in the fight against climate change and thereby fulfilling Verde's purpose of improving both the health of people and the Planet", commented Cristiano Veloso, Verde's Founder and CEO.

Verde has filed for patent protection for the N Keeper® technology. As a result of its research and development focus, the Company has already filed seven patents.

Next Steps

When Verde's Products are added to the soil along with other sources of Nitrogen or even before the nutrient's application, the N Keeper® technology is activated. Thus, both the Company's customers and the environment can already benefit from the improvements enabled by the technology.

For Plant 2, the Company will be able to add nitrogen to BAKS®, further increasing the benefits for the N Keeper® technology.

Q&A Event:

The Company will host a Q&A session on Wednesday, June 09, 2021 in order to provide further details about the N Keeper® technology. Subscribe using the link below and receive the conference details by email.

Date:	Wednesday, June 09, 2021
Time:	11:00 am Eastern Time (4:00 pm Greenwich Mean Time)
Subscription link:	http://bit.ly/Technology-Launch--QA

The questions can be submitted in advance through the following link: http://bit.ly/SubmitQuestionQ-A

Investors Newsletter

Subscribe to receive the Company's monthly updates at:
http://cloud.marketing.verde.ag/InvestorsSubscription

The last edition of the newsletter can be accessed at: http://bit.ly/InvestorsNL-April2021

About Verde AgriTech

Verde AgriTech promotes sustainable and profitable agriculture through the development of its Cerrado Verde Project. Cerrado Verde, located in the heart of Brazil's largest agricultural market, is the source of a potassium-rich deposit from which the Company intends to produce solutions for crop nutrition, crop protection, soil improvement and increased sustainability.

Cautionary Language and Forward-Looking Statements

This news release contains "forward-looking information" and "forward-looking statements" (collectively, "forward-looking statements") within the meaning of the applicable Canadian securities legislation. The Cautionary Language and Forward-Looking Statements can be accessed at this link.

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