

#### 22 December 2021

ASX Market Announcements Level 6, Exchange Centre 20 Bridge Street Sydney NSW 2000

# AGRONOMIC TESTS ON OAT CROP USING DIRECT APPLICATION OF NATURAL PHOSPHATE RETURN HIGHLY ENCOURAGING RESULTS

**Sydney, Australia,** - Aguia Resources Limited ABN 94 128 256 888 (ASX: AGR) ('**Aguia**' or the '**Company**') is pleased to report very positive results from agronomic tests on oat crops using Direct Application Natural Fertiliser ('**DANF**') products from the Três Estradas Phosphate Project ('**TEPP**') deposit.

Agronomic tests in which Aguia's DANF products, Pampafos® and Lavrato®, were applied to oat crops were carried out in partnership with Tuch Soluções Comerciais Ltda. ('Tuch'), a key distributor of fertiliser and agriproducts in the southern region of Brazil. Aguia recently signed a Memorandum of understanding with Tuch for the commercialisation of Pampafos®, as announced on 26 October 2021.¹ The tests were performed under supervision on a commercial farm selected by Tuch, located in Rio Grande, RS. The very promising performance of natural phosphate sources on oat crops in the State of Rio Grande do Sul is very relevant as the state has approximately 270,000 hectares of oat fields cultivated annually.

Aguia's DANF phosphate products have now been tested on the following crops grown in Brazil: soybean, rice, corn, wheat and now oats, with all tests returning excellent results.

### **Highlights**

- The application of Aguia's branded DANF phosphate products, Pampafos<sup>®</sup> and Lavrato<sup>®</sup>, to oat crops, returned positive results.
- Oat productivity results using Pampafos $^{\circ}$  in a dosage of 100kg/ha of P<sub>2</sub>O<sub>5</sub>, reached 92% of the productivity achieved using conventional Triple Superphosphate (TSP) in the same dosage.
- Productivity results demonstrate the high potential for the application of Pampafos® and Lavrato® in oat fields with the potential to replace conventional and chemically processed phosphate fertilisers.

### **Management Commentary**

Managing Director Dr. Fernando Tallarico said: "These results are another positive development for Aguia and reinforce that both Pampafos® and Lavrato® are highly efficient natural phosphate sources and will have broad applicability across a range of crops. The results are even more significant, as they come from our first test conducted in partnership with Tuch, which is the first

<sup>&</sup>lt;sup>1</sup> https://aguiaresources.com.au/asx-announcements/mou-signed-for-sales-of-pampafos-from-tepp/

fertiliser distributor that has signed a MOU with Aguia for future supply of Pampafos® to the RS State market."

"Aguia is exceptionally well-placed to play a leading role in the building of a more efficient and sustainable agricultural industry in RS State. We look forward to announcing further results with the continuity of the agronomic tests using our products from the TEPP."

### **Background**

As part of the development of Aguia's natural phosphate fertilisers, Pampafos<sup>®</sup> and Lavrato<sup>®</sup>, agronomic efficiency tests were conducted on the oat crop on a commercial farm selected by Tuch located in Rio Grande, RS.

The tests were conducted in partnership with Tuch and under the supervision of Integrar Gestão e Inovação Agropecuária ('Integrar'), a renowned independent agronomic consulting firm located in RS, that was retained by Aguia to plan and supervise the program.

The oat was seeded in a flat soil area during the winter season in early June 2021 and the nutrient sources were applied by launching in the field. The test consisted of 5 treatments across a total area of 5 hectares, 1 hectare per treatment, and consisted of treatment T1 (control without  $P_2O_5$ ), treatments T2, T3 and T4 with distinct dosages of  $P_2O_5$  from Pampafos<sup>®</sup> and Lavrato<sup>®</sup>, and treatment T5 (following the usual farm management), the application of a conventional phosphate fertiliser, Triple Superphosphate (**'TSP'**). Table 01 shows the distinct dosages and products used in each treatment.

Treatment	Product	Dosage per hectare
T1	Control	No source of P <sub>2</sub> O <sub>5</sub>
T2	Pampafos <sup>®</sup>	100kg P <sub>2</sub> O <sub>5</sub>
Т3	Pampafos <sup>®</sup>	200kg P <sub>2</sub> O <sub>5</sub>
T4	Lavrato <sup>®</sup>	100kg P <sub>2</sub> O <sub>5</sub>
T5	TSP	100kg P <sub>2</sub> O <sub>5</sub>

Table 01 – Summary of treatments on oat in the field.

In addition to the phosphate sources, a dosage of 64.8 kg/ha of N + 9.6 kg/ha of Ca + 4.8 kg/ha of Mg was applied in all treatments.

The oat crop was harvested in October 2021.

### **Oat Biomass Production**

Oat biomass production was determined by the manual cutting of plants green mass in sample areas. Seven areas of  $0.25m^2$ , randomly selected, were sampled for each treatment. Samples were collected when the oat pasture reached its reproductive stage. Samples were dried at a temperature of  $62^\circ$  Celsius for 72 hours in an oven. The dry samples were weighed and the dry matter values were calculated in kilograms per hectare (kg/ha).

The results of the oat dry matter yields were similar in treatments T2, T3, T4 and T5. Clearly the results from these treatments surpassed the result from the control treatment (T1).

Treatment T5, where 100 kg/ha of  $P_2O_5$  was applied through the application of the conventional phosphate fertiliser TSP, returned the highest dry matter productivity of all treatments with 4,442 kg/ha, followed by treatment T3 (the application of 200 kg/ha of  $P_2O_5$  through Pampafos®), which returned a productivity of 4,210 kg/ha.

Comparing treatments T2 and T4 with T5, (dosages of 100 kg/ha of  $P_2O_5$ ), the yields returned using Pampafos<sup>®</sup> and Lavrato<sup>®</sup> reached 92% and 93%, respectively, of the yield returned using the conventional phosphate fertiliser, TSP, in the same dosage.

These results reaffirm that both natural phosphate fertiliser products from the TEPP, Pampafos® and Lavrato®, are effective in providing the macronutrient phosphorus to the plants. There is a high similarity between treatments with the application of Pampafos® or Lavrato® and the conventional phosphate fertiliser, TSP.

Aguia plans to repeat the tests on oat in the same location during the Brazilian winter of 2022.

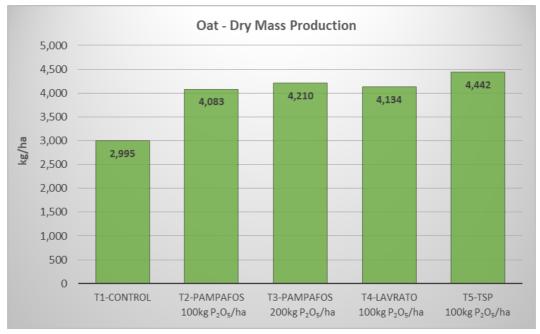


Figure 01 – Oat dry mass production resulting from each treatment. 2021 winter harvest at Rio Grande, RS, Brazil.

## AUTHORISED FOR ISSUE TO ASX BY FERNANDO TALLARICO, MANAGING DIRECTOR OF AGUIA RESOURCES LIMITED

### For further information, please contact:

## **Aguia Resources Limited - Investor Relations**

ABN: 94 128 256 888

Level 12, 680 George Street, Sydney NSW 2000 Australia

E: investor.relations@aguiaresources.com.au

P: +61 (0) 419 960 560

W: www.aguiaresources.com.au

For enquiries, please contact Ben Jarvis (Six Degrees Investor Relations) at <a href="mailto:ben.jarvis@sdir.com.au">ben.jarvis@sdir.com.au</a> or +61 (0) 413 150 448 or Nick Donlon (Aguia Resources) at <a href="mailto:ndonlon@aguiaresources.com.au">ndonlon@aguiaresources.com.au</a> or +61 (0) 419 960 560

### **About Aguia:**

Aguia Resources Limited, ("Aguia") is an ASX listed multi-commodity company (AGR:ASX) with preproduction phosphate and metallic copper projects located in Rio Grande do Sul, the southernmost state of Brazil. Aguia has an established and highly experienced in-country team based in Porto Alegre, the capital of Rio Grande do Sul. Aguia is committed to advancing its existing projects into production whilst continuing to pursue other opportunities within the sector.

### **JORC Code Competent Person Statements:**

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr. Fernando Tallarico, who is a member of the Association of Professional Geoscientists of Ontario. Dr. Tallarico is a full-time employee of the company. Dr. Tallarico has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr. Tallarico consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Caution regarding forward-looking information:

This press release contains "forward looking information" within the meaning of applicable Australian securities legislation. Forward looking information includes, without limitation, statements regarding the next steps for the project, timetable for development, production forecast, mineral resource estimate, exploration program, permit approvals, timetable and budget, property prospectivity, and the future financial or operating performance of the Company. Generally, forward looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including, but not limited to: general business, economic, competitive, geopolitical and social uncertainties; the actual results of current exploration activities; other risks of the mining industry and the risks described in the Company's public disclosure. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities law.