ASX Announcement
3rd OCTOBER 2023

FURTHER POSITIVE FIELD TRIAL RESULTS TO UNDERPIN OFFTAKE AGREEMENTS

Highlights

- First season results have been received from the Company's four-year phosphate fertilizer (brand name "Prosper Primeiro") field trials in Angola.
- Trials were planted across Angola as part of commercial offtake arrangements and government research (agronomic) institutions.
- Highly encouraging results have been received, with the average of the nine trials showing no significant difference between the four phosphate treatments which are all statistically better than the control (no fertilizer), confirming the performance of Prosper Primeiro as a direct application fertilizer suitable for use by smallholder farmers, the Company's initial primary target market.
- Latest results confirm 40 years of studies that show high reactivity phosphate rock is suitable for direct application in soils with high acidity and low phosphorus that also receive high rainfall (Angolan soil and weather conditions) and especially effective in long duration crops.
- Other key results confirm that Cabinda phosphate rock (Prosper Primeiro) when used as a direct application fertilizer:
    - delivers similar agronomic effects to imported Water-Soluble Products (WSP) products;
    - has a trend for improved performance in the second and third season without additional application (the residual effect); and
    - performs best when it is broadcast and/or incorporated in the soil to maximise the exposure of the phosphate rock to soil acidity.
- Previously completed trials have highlighted that Angolan soils are particularly high fixing, which favours the slow dissolution rate of the phosphate rock versus the high solubility of imported WSP fertilizer products.

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- Minbos commercial offtake agreements are tied to field trial performance, with these latest results bolstering the Company's confidence that forward orders will be filled for the Company's first production run.
- With field trials confirming "Prosper Primeiro" as a high RAE (Relative Agronomic Effect) fertilizer, underpinning its pricing against bulk Triple Super Phosphate (TSP)[1].

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Minbos Resources Limited (ASX:MNB) ("Minbos" or "the Company") is pleased to announce the first season results of its four-year fertilizer trials, planted across Angola as part of commercial offtake arrangements and government research (agronomic) institutions.

Trials Background

Minbos designed the four-year trials to integrate the outcomes of prior seasons field experimentation. Previously, Minbos supported eight greenhouse experiments across five seasons and fourteen field trials across three seasons.

The trials affirmed 40 years of studies that demonstrate phosphate rock with high reactivity is suitable for direct application in acid soils, with low phosphorus and high rainfall for long duration crops.

Previous trials also highlighted that Angolan soils are particularly high P-fixing which favours the slow dissolution rate of the phosphate rock vs the high solubility of imported WSP products such as TSP, DAP and MAP and NPK fertilizer (12:24:12).

Phosphate rock performs best when it is broadcast and/or incorporated in the soil to maximise the exposure of the phosphate rock to soil acidity. Water soluble phosphate is most efficient when it is applied with the seed in the furrow, minimising the opportunity for P-fixing by the soils.

Phosphate rock can be enhanced by the coincident application of small rates of water-soluble phosphate which promotes root development to better utilize the phosphate

[1]ASX Announcement: DFS delivers compelling economics for Cabinda Phosphate Project (17th October 2023)

rock. Phosphate rock performance tends to improve in the second and third season without additional application (the residual effect).

Technical Discussion

The Company's nine trials are underway in different locations across Angola, testing soy, maize, beans and potatoes. A full list of locations and crops can be found in table 1.

The trials designed for smallholder farmers will test that Cabinda phosphate rock fertilizer (Prosper Primeiro) significantly outperforms the zero-fertilization control in local conditions.

For commercial farmers, the trials are designed to test that a combination of phosphate rock in the first year and a small application of TSP in each year, is both effective and efficient.

Figure Interpretation.

The first year's trials are designed with a minimum of 5 treatments of (PR broadcasted + TSP in furrow) where X is the typical dose in kg per hectare of P2O5 as TSP used for that particular crop:

1. A zero phosphorus control, typical of smallholder local practice. (0 + 0)
2. A treatment of Triple Super Phosphate applied in the furrow. (0 + X)
3. A treatment of Prosper Primeiro broadcast and incorporated. (4X + 0)
4. Two treatments of Prosper Primeiro broadcast and incorporated with smaller applications of Triple Super Phosphate applied in the furrow. (4X + 0.25X) and (4X +0.50X)
5. In years 2, 3 and 4 only the TSP in the furrow will be applied. Prosper Primeiro will only be applied in the first year.

The bars in the enclosed figures compare average Crop Yield for each treatment, unless adverse conditions (eg, no-rain or wildlife) resulted in little or no yield in which case Dry Matter Yield has been used. The average across all nine trials is presented as "Relative Agronomic Index" bars.

The letters above the bars capture the variance in the results in each treatment. Any bars with the same letter above them are statistically no different. For example, a bar denoted with the letters AB is statistically no different to bars denoted with the only the letters A or B. However, the bars denoted with only the letter A is statistically different to bars denoted with only the letter B and vice versa.

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The average of nine trials shows no statistically significant difference between the four phosphate treatments which are all statistically better than the control. This is extremely pleasing as it confirms the performance of Prosper Primeiro as a direct application fertilizer suitable for use by smallholder farmers, the Company's primary target market.

It is even more pleasing that the there is little difference between all the phosphate treatments which include some trials where we expect the phosphate rock to underperform and would not recommend it.

Figure. 1 shows the average yield across nine trials as "Relative Agronomic Index" where the TSP treatment is 100%.

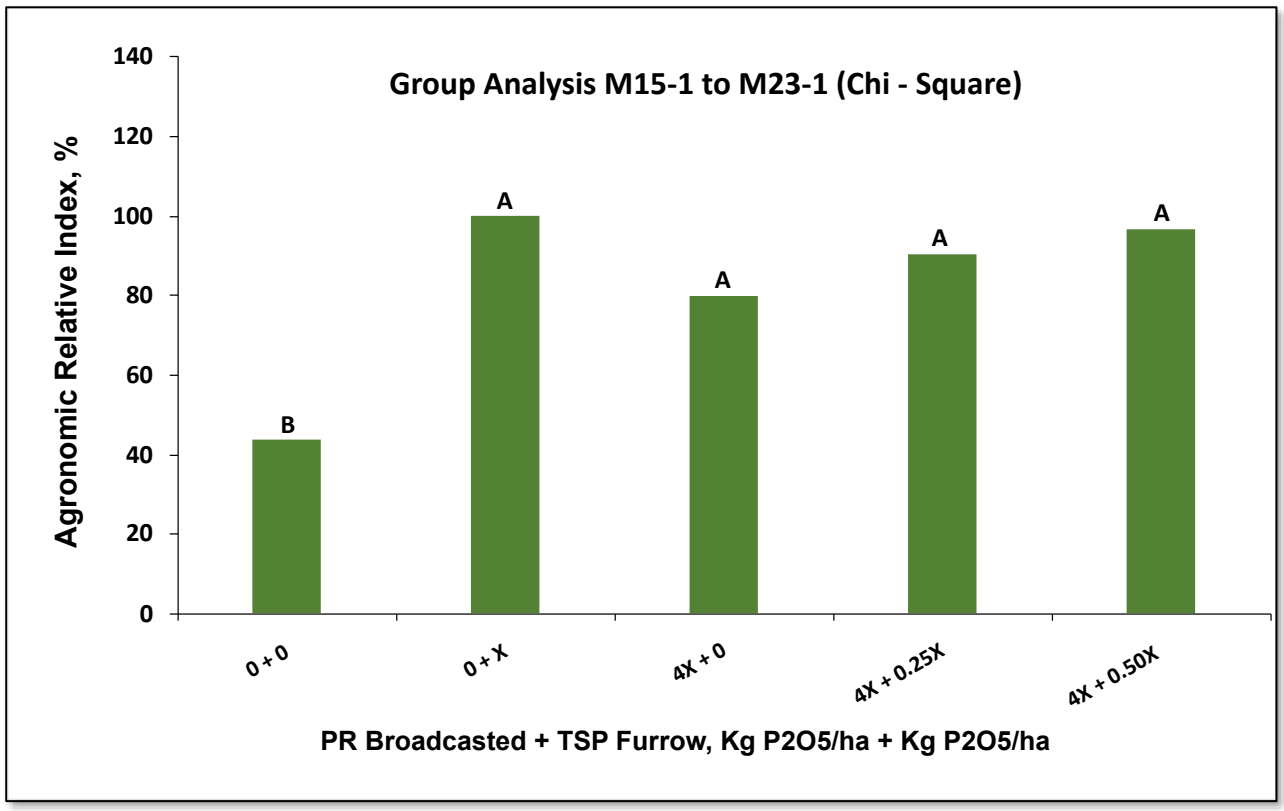

Figure 1 - Average yield as Relative Agronomic Index (%, TSP = 100) of nine field trials comparing sources of phosphate fertilizers, crop season 2022/2023. Mean comparison by the Chi - Square level of probability (Minbos Cabinda Phosphate Rock Project).

M17-1 Bean trial in Chipipa (Fig. 2) experienced an atypical month-long dry spell in February just after planting and demonstrates that Prosper Primeiro performs significantly better with adequate rainfall. None of the treatments yielded well and the comparison in Figure 2 is presented on DMY (dry matter yield)

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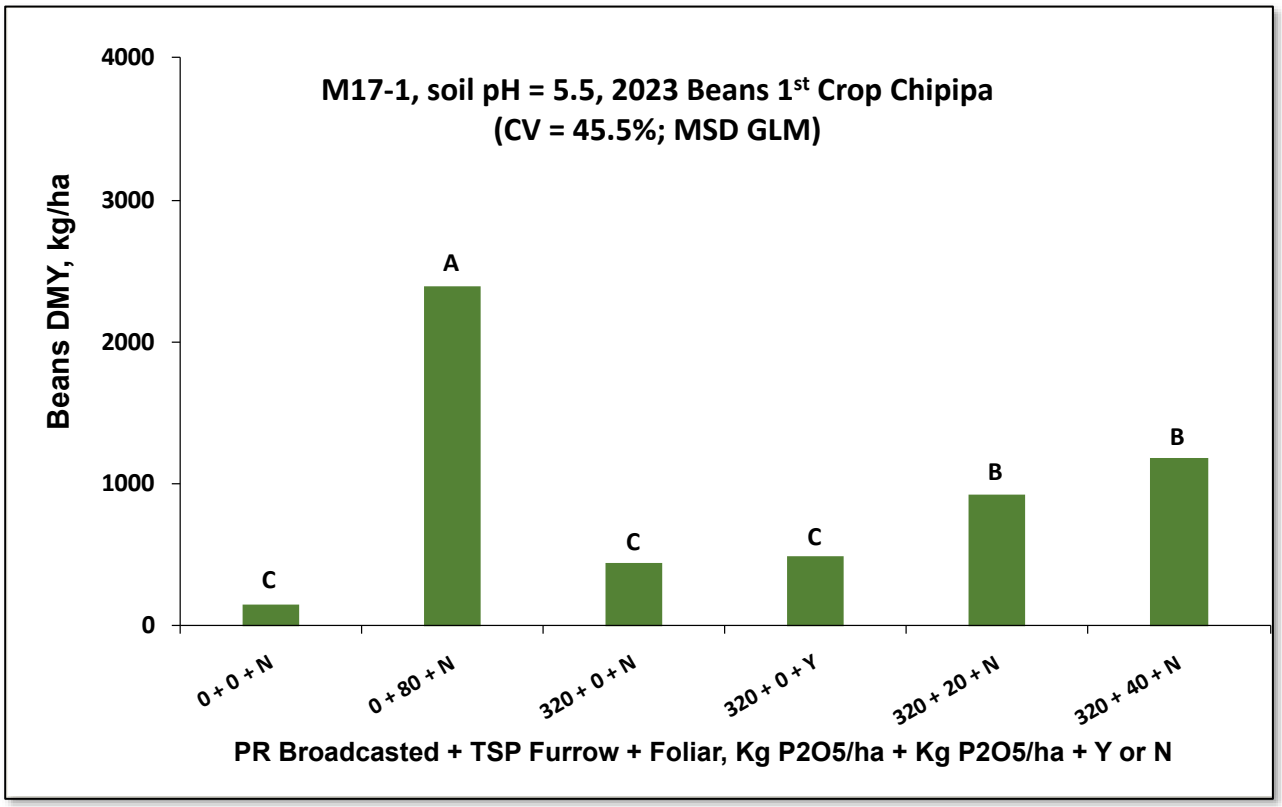

Figure 2 - Yield of first crop of potatoes in Humpata, Angola, to sources of phosphate fertilizers, crop season 2022/2023. Mean comparison by GLM 10% level of probability (Minbos Cabinda Phosphate Rock Project M22-1).

Figure 3 - Chipipa Bean trial that received no rain for a month after planting confirming PR requires rainfall. None of the treatments yielded well.

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M22-1 Potato trial in Humpata (Fig. 4) is the second potato trial where phosphate rock performed exceptionally well and in a relatively high pH and high P soil. Interestingly, all the phosphate treatments performed better than adjacent 12-24-12 (NPK) trial which is a commonly used fertilizer in Angola.

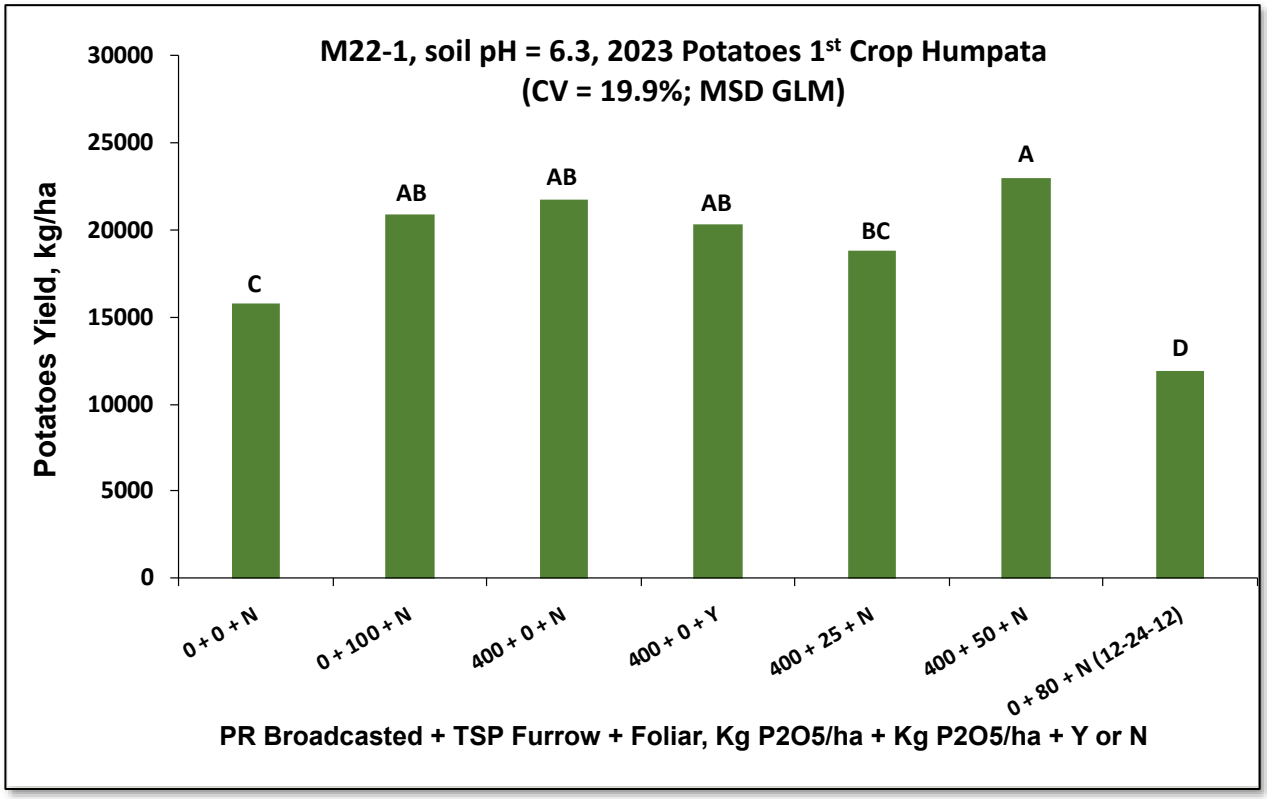

Figure 4 - Yield of first crop of potatoes in Humpata, Angola, to sources of phosphate fertilizers, crop season 2022/2023. Mean comparison by GLM 10% level of probability (Minbos Cabinda Phosphate Rock Project M22-1).

Figure 5 – Potato crop trials in Humpata being undertaken with Minbos Phosphate Fertilizer. .

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M23-1 was a soybean trial on a commercial farm in Cunza Sul (Fig. 6). Soybean is expected to perform well with phosphate rock and the first year of this trial is very encouraging. All phosphate rock treatments performed as well or better than the TSP treatment and the mixed treatments were better than TSP alone.

This trial suggests that a treatment of Prosper Primeiro and smaller dose of TSP in furrow may be a viable fertilization protocol for commercial farms.

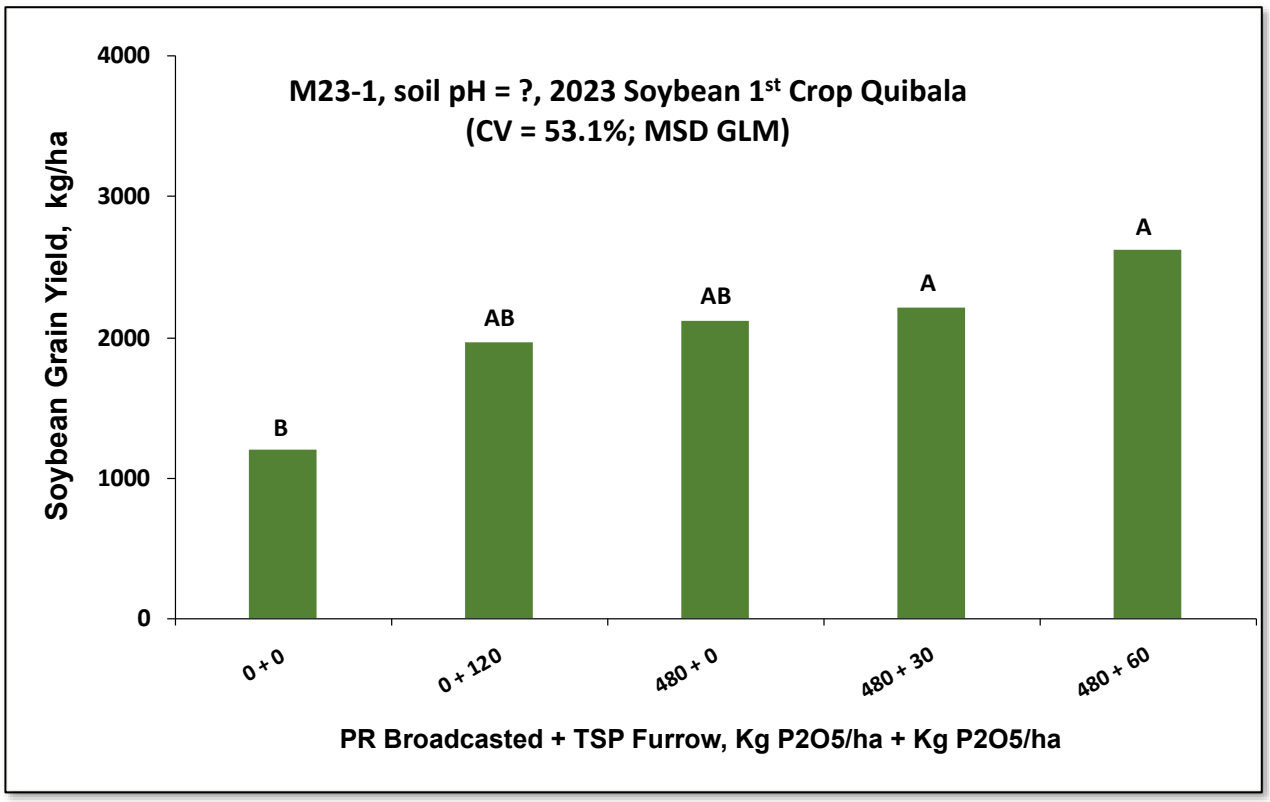

Figure 6 - Yield of first crop of soybean in Humpata, Angola, to sources of phosphate fertilizers, crop season 2022/2023. Mean comparison by GLM 10% level of probability (Minbos Cabinda Phosphate Rock Project M23-1).

Figure 7 - Quibala Soybean trial shortly after planting and after development.

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All the trials will be replanted for the 23/24 season to measure the residual effect of the phosphate rock.

A 10th four-year trial is underway at the Biocom sugar plantation. This trial was planted in January 2023. Interim tiller counting showed Prosper Primeiro outperforming during the wet season, while the TSP treatments have gained during the dry season.

The trial will be harvested for the first time in the middle of the wet season. Biocom have requested that we start formal documentation for an offtake agreement. The Biocom plantation is the largest farm in Angola and is also a significant nitrogen consumer. The farm is located only 30km from the proposed Minbos Capanda Green Ammonia project.

The sugarcane trial is designed with a matrix of three different doses for PR (broadcast) and three different doses of TSP (furrow). The experiment will enable a comparison of combination treatments as well as PR and TSP only treatments to guide the optimum economic treatment.

The Phosphate Rock Decision Support System predicted a 93% RAE for sugarcane and the trial to date is in line with the prediction with the dry season just completed and the more favourable rainy season commencing now ahead of harvest next year.

Figure 8 – Sugarcane planting at Biocom in January and progress in September.

Table 1: Minbos Crop Trial locations, Crop type and PH level were available.

NUMBER	LOCATION	CROP	pH	PROVINCE
M15-1	Cela	Beans	NA[1]	Cuanza Sul
M16-1	Catabola	Beans	6.1	Bie
M17-1	Chipipa	Beans	5.5	Huambo
M18-1	Chipipa	Maize	5.9	Huambo
M19-1	Cela	Maize	6.1	Cuanza Sul
M20-1	Quibala	Maize	NA	Cuanza Sul
M21-1	Longonjo	Maize	5.9	Huambo
M22-1	Humpata	Potato	6.3	Huila
M23-1	Quibala	Soybean	NA*	Cuanza Sul

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*NA = Not available.

The Company will continue its crop trial program with new field trials testing wheat, peanuts, cassava and caupi beans to be planted in new locations.

This announcement is authorised for release by the Board of Minbos Resources Limited.

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Compliance Statement

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices, or potential growth of Minbos Resources Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.