

## FIELD TRIALS CONTINUE TO DELIVER OUTSTANDING CROP PRODUCTIVITY RESULTS

*Customer engagement continues with plant nutrition seminars delivered to industry partners*

**Minbos Resources Limited (ASX: MNB) (“Minbos” or “the Company”)** is pleased to provide an update on field trial programs being undertaken with key industry partners, including Group Carrinho and Biocom, with Soy, Maize and other key crops again demonstrating outstanding productivity results when Minbos’ phosphate fertiliser is applied.

### FIELD TRIALS

- Recent inspections of field trials with industry partners in Huambo (Angola) by Minbos Agronomist Dr. Luis Prochnow and Chief Strategy and Marketing Officer Mr. Rob Newbold, have confirmed outstanding plant growth responses from the Company’s Phosphate Fertilizer, Prosper Primeiro.
- Visual grading results of trials demonstrated significant gains by crops fertilized solely with Prosper Primeiro (Fig. 1).

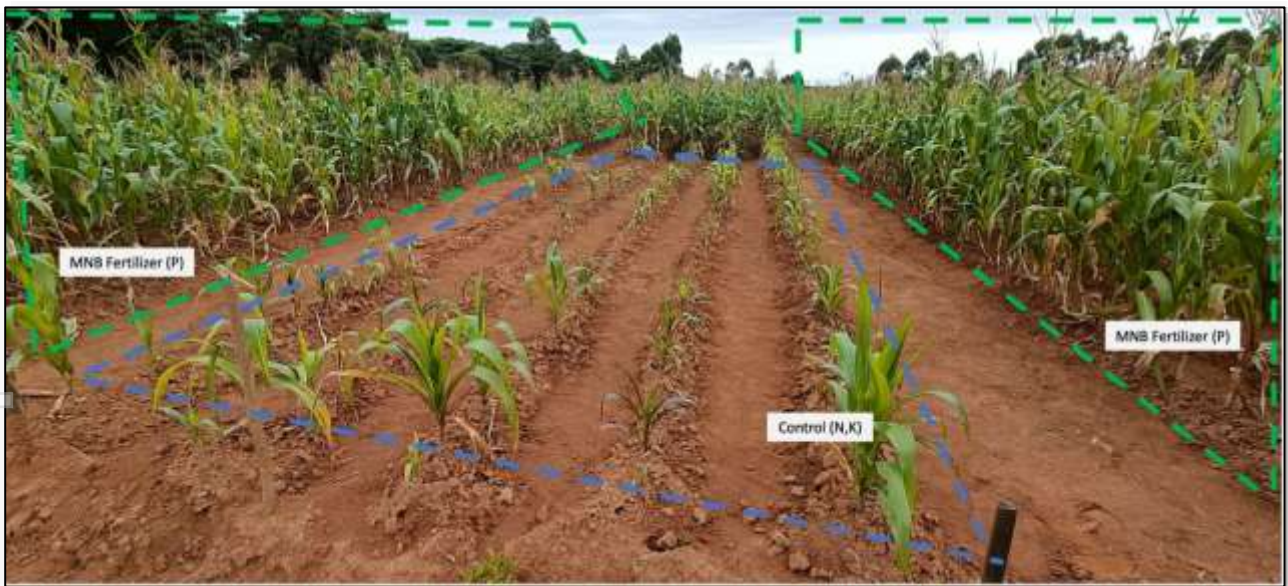


Figure 1 – Field Trials in Huambo, Angola – showing control crops (unfertilized crops) vs. crops fertilized by MNB Fertilizer (Prosper Primeiro).

- Phosphorous (P) is the basic building block of all plant (and therefore animal) cells on Earth. Without P, plants cannot grow.

- Long-term field trials continue to demonstrate exceptional plant growth responses to Minbos Primeiro.
- Estimated yields are graded 1 (low yield) to 5 (high yield) with Minbos Primeiro showing very favourable performance in the great majority of field trials.
- Importantly, the Control treatment includes Nitrogen and Potassium fertilizers, which produced minimal benefit to expected yield. This highlights the importance of Phosphate to soils and crop productivity.
- The beneficial features of Minbos Primeiro slow-release fertiliser is clearly evident.
- Especially impressive for field trial partners has been the observed “repeated effect” with crops planted in plots now in the second year after the initial application of Minbos fertiliser performing well above expectations.
- Prosper Primeiro’s repeat effect demonstrates the fitness for purpose of the Company’s fertiliser.
- The durable, multi-year effect of **Prosper Primeiro** is key to driving long term yield gains in Angola, and the upgrading of soils to investment-grade arable farmland.

#### PARTNER NUTRIENT MANAGEMENT PROGRAMS

- Spearheaded by Dr. Luis Prochnow, Minbos has been conducting nutrient management seminars with key industry partners (Fig. 2-3), including offtake customers Group Carrinho and Biocom.



Figure 2 – Dr Luis Prochnow presenting to Carrinho agronomists on the benefits of Prosper Primeiro Fertilizer.



- Industry engagement on the importance of Phosphate Fertilizers, using Prosper Primeiro in the field and the uptake of phosphate by several crops.
- Led by Minbos Chief Marketing Officer Rob Newbold, the Company is now fully engaged in customer acquisition with a comprehensive sales and marketing strategy targeting fertilizer sales in Angola.



Figure 3 – Minbos Chief Marketing Officer Rob Newbold (third from right) and agronomist Luis Prochnow (third from left) with members of the Carrinho agronomy and farm team.

### **FIELD TRIALS (DETAILED)**

Cabinda phosphate rock is an effective source of phosphorus to improve yields in Angola and surrounding countries in Africa.

Minbos is a mining company developing the Angolan Cabinda Phosphate Rock (PR) resource and will soon start producing Prosper Primeiro, a natural rock phosphate and that will be the first fertilizer to be produced in the country.

Since 2017, the Company has funded agronomic research at various levels (laboratory, greenhouse and field trials) through the International Fertilizer Development Center (IFDC), Plant Nutrition Science and Technology (NPCT) and the Agronomic Institute of Angola (IIA).

To date the project has 28 field trials completed with beans, maize, potatoes and soybean. There are 18 trials presently in the field for the 2023 – 2024 season with the same crops plus in addition to cassava, cowpea, peanuts, sorghum and wheat.

Trial programs were scientifically designed to compare sources of P and different rates of applied P against the Control treatment which contains nil P (and which represents local farmer practice in Angola).

The sources tested are a standard water-soluble P (WSP) source, such as imported MAP or TSP, the Company's Cabinda PR and the Cabinda PR with additional rates of WSP (25% and 50% of the regular rate of WSP). This season is the first trial of the residual effect. Good quality PR can, over time, present higher residual effects than WSP sources of P. The residual effect means that PR unused in the first season is utilized by crops in subsequent seasons. The PR was applied last season in the field trials photos and is relying entirely on the residual effect, whereas the WSP products have been reapplied again this season.

On average, the results of last years trials show that the PR increased the yields of all crops by at least 80% versus the control, and closer to 200% versus local practice.

The Relative Agronomic Effectiveness (RAE) of PR compared to standard WSP was on average 85% (65% to 100%). When applied in conjunction with low rates of WSP, the yields were the same as the WSP source by itself.

The effectiveness of a PR varies with several factors, the most important being PR reactivity, soil pH less than 6.0, crops with greater than two months duration and rainfall > 500 mm/year. The Cabinda PR has medium to high reactivity and the soil and climatic conditions in most of Angola are suitable for its use.

Angola currently uses very low amounts of fertilizer (estimated in 120.000 tonnes per annum). Currently, all fertilisers are imported, costs are prohibitively expensive, and the average crop yields are very low. The start of production and commercialization of the Cabinda PR is keenly anticipated by farmers and the agriculture supply chain as a means to improve yields.

**ASX Announcement**  
**30<sup>th</sup> JANUARY 2024**



Besides producing the Cabinda PR in the country, the Company will promote the import of various fertilizers and produce different blends as to serve crops and regions of Angola.

Based on the agronomic results so far the Company's vision is that smallholder farmers (Grow to Eat) will use only the Cabinda PR as a source of P, leading to a material increase to crop yields and nutritional value of their crops. Simultaneously, more technical farmers of the Grow to Sell and potentially the Grow to Export regions will be using the Cabinda PR plus additional rates of WSP.

**-END-**

This announcement has been authorised for release by the Board of Minbos.

For further information please contact:

**Investor and Media Enquires**

E: [info@minbos.com](mailto:info@minbos.com)

P: +61 8 6219 7171

**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.