

TECHNICAL FACTSHEET

BARBARY PLANTE BIOFERTILIZER AND WATER RETENTION AGENT

Barbary Plante water-retaining fertilizer is a groundbreaking agricultural amendment that enhances soil fertility and resilience. This fertilizer integrates conventional fertilizers (NPK, urea, and DAP), which are encapsulated in a biodegradable, super-absorbent hydrogel.

The product, available as green gelatin, includes:

- Nitrogen (N): 7.3%, derived from ammonium nitrate.
- Phosphorus (P_2O_5): 2.6%, derived from phosphoric acid.
- Potassium (K_2O): 8.9%, derived from potassium nitrate.
- Vital trace elements, contained within a biodegradable super-absorbent copolymer.

Barbary Plante fertilizer relies on the principle of gradual nutrient release and effective water retention, promoting balanced and sustainable crop nutrition while minimizing losses due to leaching.

Barbary Plante aids in retaining soil moisture through water absorption, thereby decreasing the irrigation requirement by 50%. Additionally, the technology lowers the need for chemical fertilizers and pesticides, including fungicides and nematicides, by 50% while greatly enhancing agricultural productivity and safeguarding the environment from pollution linked to the overuse of these chemicals. Moreover, it enhances soil health by sustainably replenishing humus in degraded soils and facilitating its conversion into arable land.

CHARACTERISTICS AND APPLICATIONS OF BARBARY PLANTE

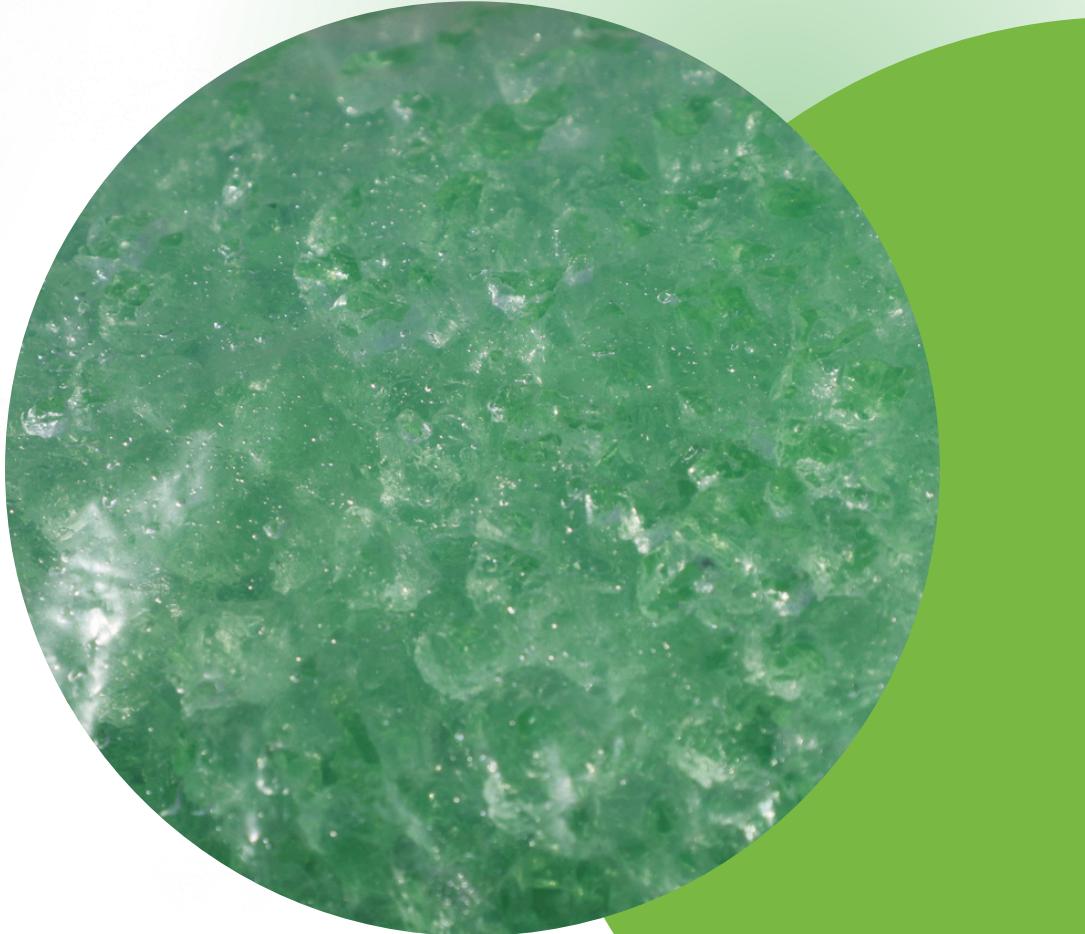
Barbary Plante fertilizer is suitable for a diverse array of crops. It has been effectively utilized on cereals, vegetable crops, and fruit trees. The product comes in multiple formulations, including:

- **Barbary Plant G3 (hydrated form).**
- **Barbary Plant G4 (dehydrated form).**

Each formulation is tailored to the specific requirements of the crop and growing conditions. Prior to use, the dry Barbary Plante granules should be soaked in water for one hour, using a ratio of 1 kilogram of dry grains to 19 liters of water, resulting in 20 kilograms of hydrated fertilizer ready for use.

UTILIZATION OF BARBARY PLANTE

Barbary Plante products are appropriate for various soil types, including desert, arid, saline, acidic, clayey, silty, calcareous, organic, and alluvial, as well as for a diverse array of crops such as cereal, vegetable, fruit, fodder, oilseed, and textile.



Crop	Application	Quantity of Barbary Plante	Area	Depth
Cereals (maize, sorghum, millet)	Sowing rows or holes	250-300 kg/ha (either 20-24 g/m linear or 8 to 9.6 g/seed bag)	80 cm x 40 cm	10-15 cm (thoroughly blended with the soil)
Legumes	Poquet (hydrated product mixed into the soil as a base fertilizer)	50-150 g	-	10-15 cm (the seedlings are subsequently transplanted)
Arboriculture	Continuous in a circular furrow	1 kg/plant (for new planting: place 1 kg in the planting hole, mix, and then plant the tree)		20 cm (then cover with earth)

SUGGESTIONS FOR SUCCESSFUL EXECUTION

- Training and awareness-raising:** Conduct practical training sessions on the application techniques and usage of biofertilizer; increase awareness among producers, particularly women and youth, regarding the agronomic and environmental advantages of biofertilizer; and encourage knowledge exchange among farmers through a field school approach.
- Availability: Ensure access to Barbary Plante.**
- Policy and incentives:** Promote the use of biofertilizer by implementing targeted subsidies or extension programs; incorporate biofertilizer into national policies for sustainable soil management and organic agriculture; and create regulatory frameworks that support the recognition and certification of local biofertilizers.
- Technical support:** Maintain consistent oversight of outcomes in the field to allow modification of practices according to feedback from producers.



REFERENCES

- Kambiré Serge: An introduction to Barbary-Plante
- AGRIMAG, 2022. Dragon jaune (HLB) et Agrumes. Barbary Plante, une solution curative et préventive. pp. 32
- Agro France International Holding. Fiche technique Barbary Plante G3 – DAP.
- Agro France International Holding. Fiche technique Barbary Plante G3 – NPK.
- Agro France International Holding. Fiche technique Barbary Plante G3 – URÉE.



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