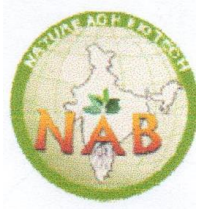


National AGH Biotech

Aqualaria Malaygold (AGAR)



GSTIN: 37AAQFN9290B1ZU

Corporate Office & Nursery:

NATIONAL AG BIOTECH

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Agarwood is called as Woods of God scientifically known as ***AQUILARIA MARIGOLD***. The plant is known for its immense fragrance. Agarwood is the dark resinous fragrant wood used in small Carvings, incense and perfume. The plant is a large evergreen tree about 20 meters tall and 1.5–2.4 meters in girth with somewhat straight and fluted bole. The wood burns with a bright flame giving off pleasant smell, used as incense in the eastern countries.

About National AGH Biotech

- ✓ National AGH Biotech is one of the top most companies producing Hi Quality Tissue Culture Super Clones and agriculture products for over 30 years in compliance with National and Internationally recognized standards.
- ✓ We are the largest processors of Agar wood clones in the India and premier supplier to the global farmers.
- ✓ We are entrusted with the triple functions of producing trained personnel, carrying out research and extension activities in agriculture and plantation sector.
- ✓ We are having well-established plant culture laboratory with hardening facilities and producing wide variety of Horticulture, Medicine plants.
- ✓ We regularly supply to various Government departments, Organizations and farmers in the areas of Arunachal Pradesh, Meghalaya, Maharashtra,

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Goa, West Bengal, Karnataka, Andhra Pradesh, Telangana and Kerala since 1993 besides exporting to Australia, Malaysia etc.

- ✓ We ensure desired quality in all the clones, uniquely qualified to meet these needs of our customers in the different ways that create ongoing good relationship. We can't accomplish them alone. Customer's relationship is an investment in the long-term success of our company.
- ✓ We are nature lovers and doing business to protect nature and making the environment green. Our wish is to make greenery as much as possible.

Climate & Soil:

The Agar can be grown in different soils, different conditions and marginal lands. The interesting and important fact about this is it can be cultivated in the farmland, in the home garden or inter-cropping with other trees. Yet it is a tropical tree requires high rainfall or good water resources.

Land Requirements:

- Before transplanting of seedlings, land should be thoroughly ploughed and harrowed to bring it up-to a good tilth. FYM @ 20 t/ha may be applied at the time of land preparation supplemented with NPK @ 60:60:40 may be applied in split doses. The fertilizer level is increased with age from 3rd year onwards.
- National AG Biotech Clones when a height of 30-40 cm should be transplanted in the field during rainy season (April-June) at optimum spacing of 3 X 3 meter.
- Intercropping System: Annual or biennial medicinal herbs viz. *Andrographis paniculata* (Kalmegh), *Withania somnifera* (Ashwagandh), *Rauwolfia serpentina* (Sarpagandha), *Bacopa monnieri* (Bhrami), *Piper longum* (Pippali) etc. may be cultivated as catch crops till the trees attain growth.
- Spading and simultaneous weeding at 90 days after transplanting is required.

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- Weed Control: Hand weeding is done after 90 days of transplanting, thereafter Gramoxone @ 0.5 kg/ha may be applied when necessary. Glycel @ 1.5 kg/ha may be applied to eradicate weeds.
- Disease and Pest Control: Attack of *Heortia vitessoides* is observed during May-August. This causes defoliation of whole tree. Application of Thiodan @ 2 ml/lit at 15 days interval during infestation is found to control the pests effectively.

Harvest:

Agar-wood develops a peculiar, persisting strong odour because of infestation by a fungal identified as *Zeuzera conferta*, it penetrates the hard wood, through wounds, injury or borers. All attempts to induce artificial infestation have failed; it is a natural phenomenon. It develops black patches and stores resinous oil which is separated through distillation of the woody chips. This oil has high value in medicine and perfumery industry.



- Crop Maturity and Harvesting: Time of harvesting depends on disease infestation in hard wood. National AG Biotech Agar clone will be ready to harvest in 6 Years. Agar is regarded as a pathological product formed as result of infection. Black patches in the bark indicate occurrence of infection and can be used for harvesting hard wood to commercial use.
- Post-harvest Management: Wood chips or chips powdered mechanically without generating heat are soaked in water for 2-3 days and transferred to stainless steel vessel which is part of a distillation unit. The distillation is done for 30-36 hours. Oil and water is collected in a separator and stored. The oil and water ratio in the condenser is kept low on account of the high boiling point. Oil is stored in closed container preferable in Aluminum bottles.
- Chemical Constituents: The woody chips have an essential oil commonly known as Agar oil from 0.8% to 2.2% in fungal infested wood of 6 years

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old plant. The wood contains hexadecanoic acid (25.0%), pentadecanoic acid (6.7%) and oleic acid (4.9%); other constituents range from 0.1 to 2.1%.

Yield:

The average yield from single tree of National AG Biotech is 8 - 12 kgs.



Cost Benefit Analysis: (at 6Kg avg. yield per tree)

1 acre	43560
Spacing (8ft x 8ft)	64
Number of plants	681
Price per plant	280
Total Plants Cost	190680
Total 1 Year cost (establishment and labor)	290680
II Year cost	116272
Total Cost in 6 Years	1062720
INCOME AFTER 6 YEARS	326880000

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The yield per plant is 6kgs per plant rounding to 4086 Kg per acre after 6 years.
At present average rate of ₹ 80,000/- per kg the income will be ₹ 32,68,80,000/-

National AGH Biotech Agar wood Plant Price - ₹ 260/-

Thanking you

NATIONAL AGRICULTURE AND HORTICULTURE BIOTECH

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