

“KALMEGH”

Commercial Cultivation

Rare Herb



CLICK-N-GROW
Agroventures Pvt Ltd

Farmer's e-Buddy

INTRODUCTION

Kalmegh is an important medicinal plant. Its scientific name is *Andrographis paniculata*. It has different names in different languages like Kalmegh, Bhunimba, Kariyatu. Four branches emerge from its main stem and further four branches emerge on these branches, on which its flowers emerge. It is a straight growing branchy plant. Its height ranges from 1-3 feet. The



color of its flowers is pink. All parts of Kalmegh plants are suitable for use. Kalmegh is a plant of Kharif season which grows on flat land and on beds. Once planted, this plant gives yield for a long time.

The warm and humid climate is suitable for the Kalmegh plant. In India, it is cultivated in Madhya Pradesh, Maharashtra, Rajasthan, Gujarat, Uttar Pradesh, Karnataka, Andhra Pradesh and Kerala. This plant grows well during the rainy season. The pH of the soil 6.5 to 7.5 is required for its cultivation.



MEDICINAL PROPERTIES

In Indian medical system, Kalmegh is a divine medicinal plant which is also known by the names of green absinthe, desi absinthe, Belven, Kiriya. Its taste is bitter, in which a type of alkaline element - Andrographolides, Kalmeghin is found, the use of whose leaves has been found very beneficial in reducing fever, jaundice, dysentery, headache, anthelmintic, blood

purifier, antidote and other stomach diseases. Kalmegh is used in malaria and bronchitis diseases. It is used to cure liver related diseases. Its root is also used as an appetite suppressant. Use of Kalmegh removes gas, indigestion, stomach worms etc. It is also beneficial in the treatment of blood related diseases. A type of ointment is prepared by mixing it with mustard oil which is very useful in curing skin diseases like ringworm, itching etc. In an experiment conducted in Chile, it was found that when 1200 mg of Kalmegh juice was given to a patient suffering from runny nose due to cold, his cold was cured. A report by the Indian Drug Institute has also acknowledged that Kalmegh has immunity-boosting properties and is a panacea for malaria and other types of fever. Its regular consumption purifies the blood and prevents stomach diseases. It acts as a booster for the liver. Consuming it prevents acidity, gout and skin diseases.

Due to its many uses, its demand is increasing every year. To meet its demand, the only option is to cultivate it commercially.

SOIL REQUIREMENT

It has the ability to adapt to all types of soil. Well- drained sandy soil, loamy soil, black soil and red soil are most suitable for Kalmegh cultivation. Whereas it cannot be cultivated in smooth black, hard and waterlogged soils. The pH of the soil 6.5 to 7.5 is required for its cultivation.

CLIMATE

Kalmegh is a plant of tropical and sub-tropical climate. In India it is grown with Kharif crops before the rainy season. Its plants grow well in the rainy season. Annual rainfall of around 110 cm is sufficient for its cultivation. Its plant can grow easily in summer season. But frost during winter season is harmful for it. This plant requires 20 to 35 degrees temperature for germination and normal temperature for its growth. It can easily survive at a temperature of 35 to 45 degrees in the summer season.

IMPROVED VARIETIES

Apart from **AK-1 (Anand Kalmegh-1)**, **CIM-Megha**, **IC-111286**, **IC-111287**, **IC-111289**, **KI-5**, **IIIM(J)-90**, not many varieties of Kalmegh have been developed. There are two major varieties mentioned below which are grown mostly by farmers for their good yield.

1.CIM-Megha

This variety has been released by the Central Institute of Medicinal and Aromatic Plants, Lucknow. Good yielding variety, yields 3 to 4 tons of dry branches per hectare are obtained. Planting time is in month of June and can be harvested twice a year. Its plant gets ready for harvesting 120 days after transplanting.

2.Anand Kalmegh-1

This variety has been developed by Anand Agricultural University, Gujarat. Plants of this variety are normally of 2-3 feet height and produce 22 to 25 quintals yield per acre. Plants of this variety are ready for harvesting in 120 to 140 days.



Farmer's e-Buddy

FIELD PREPARATION

For the cultivation of Kalmegh, initially deep plowing of the field is done with soil turning ploughs. After that, organic manures and fertilizers should be used in the field, organic fertilizers like vermicompost, neem cake, gypsum powder, Trichoderma powder. After ploughing, leave the field open for some time. After this, apply farm yard manure in the field and plow it with rotavator and mix them well in the soil. The field is plowed after irrigation. After plowing, when the soil of the field starts appearing dry on top, then make the soil of the field crumbly by running the rotavator and level the field.

PLANTING MATERIAL AND SOWING

In Kalmegh cultivation, seeds are sown in two ways - in the first type, the seeds are broadcasted into the prepared field by hands. The seeds are mixed with soil/sand or manure in the ratio of 9:1. In the second method, first nursery is prepared. To prepare the nursery, first plow the beds properly and add farm yard manure or vermicompost and mix it well in the soil. After that prepare a bed of appropriate length and width.

Plant its seeds in these beds keeping a distance of 2-5 cm. Before planting the seeds, treat them with cow urine and Trichoderma. 5 kg seeds are enough to prepare plants for one acre of field. It is most appropriate to plant seeds in the month of May. After planting the seeds, to maintain moisture in the beds, they should be continuously irrigated at the appropriate time. Plants become ready about 40 to 45 days after planting the seeds. When its plants become 10 cm tall, they are planted in the fields.

PLANTING TIME AND METHOD

Planting of Kalmegh plants should be done in the months of June and July at the start of monsoon, the plants get the proper environment to germinate. During rainy season crop does not require irrigation. Another right time for planting is in the month of October to November when the winter starts.

Planting in the fields can be done both on flat lands and on beds. It should be planted on the flat land in a rows at a distance of 30 cm x 15 cm. While on the beds it should be planted at 40 x 20 cm. 40,000 plants are planted in one acre.



IRRIGATION

Kalmegh plant is more dependent on rain and does not require much irrigation for its one-time cultivation. But if needed, two to three irrigations should be applied. And in perennial cultivation, depending on the requirement, 6 to 8 irrigations can be done in a year.

WEED CONTROL

Weed control is most important in Kalmegh cultivation. First weeding of the field is done about 20 to 25 days after planting. After that two more weedings should be done at an interval of 20 days. When its plants grow and cover the ground after monsoon, there is no need for weeding.



PLANT DISEASES AND PREVENTION

No specific diseases have been seen in Kalmegh plants till now. But during the growth period of plant, a special disease is seen, known as Dhumak. To prevent this disease, plants should be lightly irrigated. Apart from this, if any kind of insect attack is seen on the plant, then appropriate quantity of cow urine, neem oil and Trichoderma solution should be sprayed on the plants.

HARVESTING AND POST-HARVEST MANAGEMENT

Kalmegh plant is cultivated in two ways, one is 120-140 days cultivation, in which the plant is uprooted once with roots and cut into pieces and the other way is one-year or multi-year cultivation. In perennial cultivation, plants can be harvested twice a year. The crop is ready for harvest about 130 days after transplanting in the field. After which its first harvesting is done in

November and December. While the second harvesting is done after the rainy season. It should be harvested after 50% flowering. For perennial cultivation it should be harvested 5-10 cm above the ground. So that new branches can be formed again in the plants. After harvesting, plants are dried in shade.



Katapila blong waetbun



Katapila blong alean kabis



Krasopa



YIELD AND PROFIT

If Kalmegh is cultivated with good care, one and a half to three tons of dried branches can be obtained from one acre, the market price of which is Rs 40 to 50 per kg. And up to one quintal of seeds can be obtained, whose market price ranges from Rs 300 to Rs 500 per kg. According to this, farmers can easily earn more than Rs 70 thousand by cultivating Kalmegh for 120 days.



CLICK-N-GROW
Agroventures Pvt Ltd
Farmer's e-Buddy

COST OF CULTIVATION- 4 Months

Particulars	Work	Total expenses
Land preparation	Ploughing, levelling, etc.	2,000
Planting material/ seeds	5 kg seeds @ Rs. 2000/- per kg	10,000
Organic fertilizers	Organic fertilizers, growth boosters, etc.	10,000
Transportation & Other expenses	Sowing, irrigation, harvesting & Transport, etc.	10,000
Total expenditure (120 days)		Rs.32,000/-

PER ACRE OUTPUT

Production	Production	Buyback Rate	Total Income
Panchang (Dry leaves, roots, branches, seeds)	4500 kg	Rs. 30 per kg	Rs.135,000/-
Total expenditure			Rs. 32,000/-
Net profit/ income (120 days)			Rs.103,000/-



COMPANY PROFILE

Click-N-Grow Agroventures Pvt. Ltd.



INTERLINKED FARM SOLUTIONS AT ONE PLACE

Click-N-Grow Agroventures Pvt. Ltd.



Corporate Address: C/17-18, Dakshata Nagar Complex, Sindhi Camp, Akola, Maharashtra- 444001
Registered Office: C/2, Matoshri Apt, Sane Guruji Nagar, Khadki, Akola, Maharashtra- 444004



Mobile: +91-7775008660, 7030281210, 9730951149



Email: ekisanzone.com | info.mitcad@gmail.com | ekisanzone1@gmail.com



Website: www.ekisanzone.com | www.kisansat.ekisanzone.com

