# **SESAME**

Sim Sim, Bene, Sesamo, Agonjoli, Benne

Sesamum indicum Pedaliaceae

## ECHO® PLANT INFORMATION SHEET

# Origin

Sesame is one of the oldest cultivated plants in the world. It has been cultivated for some 4,000 years. India and China are the largest producers of Sesame. Other large producers include: Pakistan, Turkey, Thailand, Egypt, Ethiopia, Sudan, Uganda, Venezuela, Colombia, Mexico and Nicaragua. Sesame is a drought tolerant plant, but does require moisture for germination and a minimum of 50-65 in. of rain per season for a good harvest.

# **Uses**

A large majority of Sesame is marketed as seed. Sesame seeds contain 50% oil and 25% protein. They are used in baking and oil production. The oil and foods fried in the oil have a long shelf life. The oil can be used for lighting and in the production of soaps, paints, perfumes, and pharmaceuticals. The meal left over after oil production can be used as a feed for livestock and poultry (34-50% protein).

## **Common Names**

- Malay
  - o Bijan
  - Wijen
- Tagalog
  - Linga

#### Cultivation

Sesame is grown from seed. Seeds should be planted 2 cm deep in moist soil with a temperature of 21° C. Temperatures of 25°-27° C are optimum. Rows should be 75 cm apart with one plant every 6-12 cm down the row. Make sure water is provided at germination. The plant can not withstand water logging.

# **Harvesting and Seed Production**

Sesame requires 80-140 days frost free before harvest. When Sesame ripens, the capsules split open and release the seed. As soon as the first capsules burst or capsules change from green to yellow, the pods should be harvested to minimize loss of seed. The plants should be cut at ground level and let to dry in an upright postion until all the capsules burst open. Then the seeds can be harvested by letting the seeds fall out. The moisture content of the seeds is only 10%, so there is little chance of molding.

## **Pests and Diseases**

Since Sesame is a slow grower, it is a poor competitior against weeds. Careful selection of site is important in this aspect. Diseases are a problem in areas of high humidity and rainfall. In areas of moderate rainfall, problems with disease can be avoided by rotating crops. In drier climates, disease is not a problem for Sesame. Insect damage does not seriously affect Sesame. In places where this might be a problem, planting at the beginning of the rains will prevent those problems.

# **Cooking and Nutrition**

Sesame oil contains oleic and linoleic acids, as well as the antioxidant sesamol. It is used to make dressings and margarine. The seeds contain the essential amino acids methionine and cystine. Sesame can serve as a supplement for diets that are high in starchy foods. The seed and meal are high in calcium, phosphorus, iron, and the vitamins thiamin, riboflavin, and niacin.

#### References

Heuzé V., Tran G., Bastianelli D., Lebas F., 2017. Sesame (Sesamum indicum) seeds and oil meal. Feedipedia, a programme by INRA, CIRAD, AFZ and FAO. https://www.feedipedia.org/node/26 Last updated on June 22, 2017, 16:08

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