# EGYPTIAN SPINACH



# FAMILY

Tiliaceae

## **BOTANICAL NAME**

Corchorus spp.

## **SPECIES**

Tossa Jute (*C. olitorius* L.) White Jute (*C. capsularis* L.) Wild Jute (*C. tridens*)

#### **COMMON NAMES**

Molokhia, Jew's mallow, Jute mallow, Nalta jute, Bush okra, Krin krin, Sigli, Ademe, Ayoyo, Ewedu, Saluyot, Espinaca Egipcia

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# **CULTIVATION**

## PERIOD

Spring (after last frost) through fall or anytime in a greenhouse when doing container gardening.

## PROPAGATION

Direct seed to a depth of approximately 0.6-1.25 cm. (1/4 to 1/2 in.) by broadcasting or strip sowing (e.g. 10 strips/m<sup>2</sup>). Planting density 0.5-20 g/m<sup>2</sup> (1.3-52.7 oz/ft<sup>2</sup>). Can also be grown in containers and established using transplants.

## **GROWING CONDITIONS**

Soils: Sandy, loamy and clays soils but prefers well drained soils. Soil pH: Tolerates acidic, neutral and alkaline conditions (4.5-8.2). Temperature: 20°C-40°C (68-104°F) but 16.8 to 27.5°C (62-81.5°F) is optimal. Relative humidity: 70-80%. Water Requirement: 5-8 cm./week (2-3 in./ week).

# CARING FOR THE GROWING PLANT

Water, fertilize, control weeds, and insects. In the long term, rotate with other crops to minimize disease occurrence.

## DAYS TO MATURITY

About 4 weeks after seeding

# HARVEST / YIELD POTENTIAL

Cut off top part of the plant comprising leaves and tender stem. Can be harvested multiple times depending on how well it grows. Potential yield is 20-41 t/ha (8.5 - 16.6 t/A).

# AREAS COMMONLY CULTIVATED

Africa, the Middle East and Asia

## PLANT DESCRIPTION

It is an erect plant grown as an annual and ranges between 60 cm to 150 cm (23.6-59 in) in height. It is a highly nutritious leafy vegetable with somewhat slimy edible leaves and young pods. It is a dicot and can produce fiber.

# **VISIT US**

http://www.pvamu.edu/ cahs/carc/plant-systems/

Facebook and Instagram: PVAMU CAHS Specialty Crops

**Twitter: @pspecialtycrops** 

# **GROWING STEPS**

Buy seeds from a reliable source and start seedlings indoors or in a greenhouse if you want to use seedlings to begin your garden. Prepare your site or containers. Plant when conditions are optimum. Water as needed. Feed with fertilizer when plants are grown. Control weeds, diseases and insects. Harvest leaves when the plant is grown.

# **POTENTIAL PESTS AND DISEASES**

## PESTS

Leaf-eating beetles, caterpillars semilooper (*Anomis sabulifera*), nematodes (*Meloidogyne* spp.), and two-spotted spider mite (*Tetranychus urticae*).

# DISEASES

Seedling damping-off and anthracnose spots on leaf

# **CULINARY USES**

Leaves can be used for stews, soups, and pies.

# **NUTRITIONAL BENEFITS**

High dietary fiber. Low in calories. Vitamins A, B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub>, B<sub>5</sub>, B<sub>6</sub>, B<sub>9</sub>, C, E, and K. It also contains calcium, iron, magnesium, phosphorus, potassium, zinc, and antioxidants.

# **REPORTED HEALTH BENEFITS**

Cardiovascular, bone and immune system health, diuretic, galactogogue, purgative, tonic, demulcent and deobstruent, skin health.

# REFERENCES

Abdul-Soud M. and Mancy A.G.A. (2015). Urban horticulture of molokhia and spinach environmentally via green roof system and vermicomposting outputs. Global J. of Advanced Research 2(12): 1832-1847.

Islam, M. M. (2013). Biochemistry, medicinal and food values of jute (*Corchorus capsularis* L. and C. *olitorius*) leaf: A review. International J. of Enhanced Research in Sci. Tech. & Eng. 2(11): 35-44.

Ogunrinde A.T. and J.T. Fasinmirin (2011). Soil moisture and yield of jute mallow (*Corchorus olitorius*) under three different soil fertility management. Proceedings of the Environmental Management Conference. Federal University of Agriculture, Abeokuta, Nigeria.

Ngomuo, M., Stoilova, T., Feyissa, T., Kassim, N., & Ndakidemi, P. A. (2017). The genetic diversity of leaf vegetable jute mallow (Corchorus spp.): A review. Indian Journal of Agricultural Research, 51(5). https://doi.org/10.18805/IJARe.A-240iew.

