# GOJIBERF



#### FAMILY

Solanaceae

#### **BOTANICAL NAME**

Lycium barbarum (L.)

#### **CULTIVARS**

Sweet Lifeberry, Phoenix Tears, Big Lifeberry, Red Zepplin

#### **COMMON NAMES**

Barbary wolfberry, Matrimony vine, Chinese boxthorn, Kuko, Red medlar, Duke of Argyll's Tree

### Peter A. Y. Ampim and Dania Rivera-Ocasio

## **CULTIVATION**

#### PERIOD

Plant in spring after last frost

#### PROPAGATION

Can be propagated by seeds, cuttings or bare roots. Recommended for zones 4 to 9.

#### **GROWING CONDITIONS**

Soils: Prefers a light loam but tolerate a wide range of soils. Soil pH: 7 to 8. Temperature: Plants tolerate between - 23 to 37.8°C (-9.4 to 100°F). Relative humidity: Hot or hot dry weather is preferred. Water Requirement: Drought-tolerant when established. In general, apply 2.54 cm. (1 in.) of water per week. Full sun as well as hot and dry conditions are best for fruit quality.

#### CARING FOR THE GROWING PLANT

Prune after second year to keep plants open and enhance light penetration through canopy. Control weeds around plants with heavy mulch or landscape fabric. Space plants 1.2-1.5 m. (4 to 5 ft.) apart in all directions.

#### DAYS TO MATURITY

Approximately 35 days after full bloom

#### HARVEST / YIELD POTENTIAL

Bears fruits in the summer and autumn. Needs to be picked by hand or shaking. Fruit production starts on two-year-old plants. Maximum production is reached at 3 to 5 years after planting. Yields range from 0.9-2.7 kg. (2 to 6 lb.) per plant. Fruits can store for approximately 2 weeks in a refrigerator after harvest.

#### AREAS COMMONLY CULTIVATED

Northwest China, Tibet, and other parts of Asia

#### PLANT DESCRIPTION

It is a deciduous shrub. Its growth habit depends on the cultivar and ranges from viny to erect. Plants can be up to 3 m (9.8 in) tall. Plants are selfpollinated. Fruits are 1-2 cm (0.4-0.8 in) long, bright orangered ellipsoid in shape.

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# **GROWING STEPS**

Buy seeds or planting material from a reliable source. Prepare your site or containers. Plant when conditions are optimum. Water as needed. Fertilize when plants are grown. Apply 57.2-71.5 g. (4 to 5 tablespoons) of 16-16-16 per  $0.9 \text{ m}^2$  (10 ft<sup>2</sup>) per year. Split apply the fertilizer at budbreak, flowering, and at ripening. Reduce fertilization when grown in fertile soil. Control weeds, diseases and insects. Harvest when mature.

# **POTENTIAL PESTS AND DISEASES**

#### PESTS

Goji gall mite (Aceria pallida Keifer)

DISEASES

Powdery mildew and blossom end rot

## **CULINARY USES**

Fruits can be eaten raw, cooked, and pureed to make juice. It can be used to make tea or wine and can also be dried.

## **NUTRITIONAL BENEFITS**

Fiber, protein, vitamins A, B, C, selenium, potassium, iron, calcium, 18 amino acids (11 essential), healthy unsaturated fatty acids, phytochemicals including beta carotene, zeaxanthin, lycopene, cryptoxanthin, lutein, and polysaccharides.

## **REPORTED HEALTH BENEFITS**

Anti-aging, vision, kidney and liver functions. Neuroprotection, anti-fatigue/endurance, antioxidant properties, immunomodulatory, antitumor, and cytoprotection. Improves fertility.

## REFERENCES

Amagase, H., and N.R. Farnsworth 2011. A review of botanical characteristics, phytochemistry, clinical relevance in efficacy and safety of *Lycium barbarum* fruit (Goji) Food Research International 44 (2011) 1702–1717.

Maughan, T. and B. Black 2015. Goji in the garden. Horticulture/fruit/2015-05pr. Utah State University, Extension.

