

African Leafy Green Vegetables and the Reawakened 25

WHAT IF YOU COME BACK HOME TO DISCOVER that the plants you were used to eating when you were a kid are slowly disappearing? That's what happened to the Kenyan scientists in the '90s when they discovered that the leafy vegetables their moms forced them to eat were extremely endangered. Highly nutritious and well adapted plants like Cat's Whiskers and the Cowpea were hopelessly condemned to marginality. An immeasurable number of genetic and food resources ran the risk of silent extinction due to the introduction of more mainstream foreign vegetables such as kale and collards. An international alliance of researchers decided to stand up for the vegetables before they reached extinction. They worked to help these crops return to fields and tables. This is a story of great successful action that relentlessly continues to produce positive impacts in diets throughout Africa.



COWPEA

Vigna Unguiculata

Origin: West Africa
Grown: throughout tropical/subtropical regions
Two of many edible bitter leafy greens native to Africa, high in calcium and iron

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CAT'S WHISKERS

Cleome Gynandra

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BOTANY

Cat's whiskers is a herbaceous annual wildflower thought to be native to either Southeast Asia or Africa. The plant grows up to 3 ft/1 m tall. The leaves are composed of 5 lobed leaflets alternating off of one main erect stem. Small white flowers form at the top of the stem. The plant has a main tap root and smaller spreading roots.

The cowpea is an annual legume that thrives in warm temperatures. The plant can grow as a short bush or a long vine depending on the variety. The three-parted egg-shaped leaves are a deep green color. The leaves are broad and act as a great groundcover. The hollow stems end in a leaf or purple/white flowers which form long, thin seed pods. Pods can form in as little as 60 days after planting. The seeds are kidney shaped and white with a black 'eye'. The cowpea's tap root can reach down to 8 ft.

CULINARY USE

Cat's whiskers young tender leaves and shoots are sharp and tangy, similar to mustard. They are boiled and eaten in stews, as a side dish or as a condiment. If the leaves are too bitter, they are cooked with milk or other leafy greens such as cowpea leaves; occasionally groundnut paste is added. The leaves can also be dried, ground and used as a powder. In southern Africa, the leaves are blanched, made into small balls and dried for preservation and sale. Dried or powdered, the leaves can be stored for a year and reconstituted with water for use.

The leaves, flowers and seeds of the cowpea are consumed and the plant is also used for animal forage. The cowpea bean is boiled and eaten combined with starchy foods such as maize grits, or added to cereal-based infant food to increase protein concentrations. The green leaves are boiled and eaten as a side or in stew.

NUTRITION AND MEDICINAL USE

African leafy greens are generally dark green and bitter, rich in vitamins A, C, and E, calcium and folate. The leafy greens provide a substantial amount of protein and iron, great for diets low in animal proteins.

Cat's whiskers leaves are especially high in calcium and beta-carotene. The leaves are used for their antiinflammatory and antioxidative properties. Due to their moderate iron content, boiled cat whiskers' leaves are given to people who have lost blood- mothers after child delivery, folks who have been injured- and an infusion of the leaves is used to treat anaemia.

Cowpea seeds contain 25% protein by dry weight, gaining them the title of "poor man's meat" for their high protein content. The leaves have similar nutritional properties as cat's whiskers, sweet potato leaves, and amaranth leaves.

AGRICULTURE

Cat's whiskers grows naturally across tropical and subtropical regions of Africa and Asia. In many parts of the United States, it is considered an invasive weed. It grows easily in disturbed soils and is drought-tolerant. For consumption, the leaves are often collected from wild, non-cultivated plants. With improved cultivars, cultivation of cat's whiskers is becoming more common.

The cowpea is adapted to hot temperatures, low waterfall, and sandy poor soils. The cowpea is grown in tropics throughout the world, and can thrive even in semi-arid regions and dry savannas. As a legume, the cowpea has nodules on its roots which hold bacteria that fix nitrogen in the soil, allowing the crop to grow in low-quality soils without nitrogen fertilization and make nutrients available for other crops. The cowpea has a deep tap root to reach hidden groundwater and a wide vegetative spread; these important adaptations provide weed suppression and prevent erosion. Cowpea cultivation is most popular in Nigeria, Niger, Brazil, Haiti, India, Myanmar, Sri Lanka, Australia and the southern United States.

HISTORY

Cat's whiskers originated from either tropical Africa or Southeast Asia, and spread quickly as a wildflower. Farmers have generally saved seed from their crops to plant the next year, adapting local varieties. Increasingly, the seed of improved cultivars are available commercially.

The cowpea has been grown in Africa for centuries, perhaps as one of the first domesticated crops. Cowpea remains dating back to the second millennium BCE have been found in Ghana. From Africa, cowpeas traveled to Southeast Asia and the Mediterranean, where they were eaten by the Greeks and Romans. Cowpeas reached the Americas through the slave trade. Cowpea beans are part of a popular dish, "Hoppin' John," which is eaten in the Southern United States as a ritual for good luck on New Year's day.

RESEARCH

Both cowpea and cat's whiskers are increasingly being researched and bred to create improved varieties and seeds better adapted to drought and other environmental fluctuations. Agronomic knowledge of many African green vegetables, like cat's whiskers, is still scarce and in need of improvement. Cat's whiskers offers many opportunities for research, such as investigation into its possibilities as an insect/tick repellent and the potentials of the oil from its seed.

CUISINE

- [Six super simple recipes for Africa's super vegetables](#) - AfricaFreak
- [Mutsotso \(Dried CowPea Leaf\) Recipe \(munyemba\)](#) - Ivy's Kitchenette
- [Munyemba \(Cowpea Leaves\) recipe](#) - PrincessTafadzwa
- [Munyeve \(African spider flower leaves\) recipe](#) - PrincessTafadzwa
- [Cowpeas leaves Recipe | Chawlichha palyachi Bhaji](#) - Konkani Flavours
- [Sautéed Cowpea Greens and Squash](#) - Loam Agronomics

SOURCING

- [Buy Cleome gynandra](#) - B and T World Seeds
- [Cleome Gynandra Seeds](#) - Fair Dinkum Seeds
- [Cowpeas](#) - Baker Creek
- [Heirloom Cowpeas](#) - Victory Seed Company

COMMUNITY RESOURCES

- [African leafy vegetables](#) - Bioversity International
- [Indigenous / Traditional African Leafy Vegetables](#) - Research and Promotion Program
- [African Leafy Vegetables](#) - Horticulture Innovation Lab [Video]
- [The rise of Africa's super vegetables](#) - Nature [Article]
- [Spider Flower Leaves](#) - Arca del Gusto - Slow Food Foundation

RESOURCES

- [Spider plant \(Cleome gynandra\)](#) - World Vegetable Center
- [Cowpea \(Vigna unguiculata\)](#) - USDA Plant Guide
- [Cowpea \(Vigna unguiculata \(L.\) Walp\) for food security: an evaluation of end-user traits of improved varieties in Swaziland](#) - Gondwe et. al
- [Cowpea Breeding](#) - J.D.Ehlers and A.E.Hall
- [Cleome gynandra](#) - (PROTA)
- [Spider plant illustration](#) - Cweya et. al
- [Cowpea illustration](#) - PROTA

