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**Scientific Name:** *Vachellia tortilis*

**Synonyms:** *Acacia tortilis*

**Common Names:** umbrella thorn

**Botanical Family:** Fabaceae

**Botanical Characteristics:**

The umbrella thorn is a slow-growing tree/bush that reaches heights of 5-20 m tall in its natural habitat. The bark of this species is gray to dark black, with twisting longitudinal fissures. Primary branches are slender - about 40 mm (1.5 inches) in diameter while secondary branchlets are about 15 mm (0.5 inches) in diameter. The stems of the umbrella thorn contain very large thorns, which usually develop on alternate side of consecutive nodes. 2-6 green, 1" long leaves emerge at each node along the stem. Flowers also develop along stem nodes. On each node, there can be up to 4 flower heads, each is globose, 15 mm (0.5 inch) long and cream/white colored. Flowers are conspicuously fragrant and form in mid-summer but have been observed forming in early February. After the flowers have been pollinated, fruit with seeds form. The seed pods are dry indehiscent legumes measuring 12 cm (5 inches) in length and 0.75 cm (0.3 in) in diameter with a unique shape (1). They are rolled up into a tight circle or a helix.

Compound: Fab vac

Geographic Origin: Sudan  
Ecozone Origin: Afrotropic  
Biome Origin:

### **Natural History:**

This species of plant is very widely distributed over Africa. It is mainly in southern Africa, including Namibia, Botswana, and South Africa (2). The genus *Vachekkoa* is named after a collector of plants, George Harvey Vachell. The specific epithet *tortilis* refers to the plant's twisted seed pod shape (1). It is believed that Noah from the Old Testament used the wood of this tree to make his ark (3).

### **Cultivation Notes:**

The umbrella thorn is not a highly cultivated species. This is because of its very niche-growing preferences. This plant does best in zones 10-12 (1). They can tolerate temperatures up to around 50 degrees Celsius (122 degrees F) and as low as 0 degrees Celsius (32 degrees F) (3). However, juvenile trees are much more susceptible to injury from temperatures than their mature counterparts (3). This plant does best in substrates that are sandy, loamy, and well-draining. They must be grown in full sun and dry out between watering (2). To propagate this plant, stem cuttings, and seeds can be used. However, this plant is considered a tricky species to propagate. For seed propagation, scarification is needed (3).

### **Ethnobotany:**

The umbrella thorn tree has been used for medicinal and other human purposes. The seeds, bark, and stems are used the most for their medicinal properties. An infusion can be made from the bark, which is consumed as a treatment for stomach aches and diarrhea. Also, when the bark is dried and then powdered and it can be used as a disinfectant in healing wounds. The Senegalese people have used the powdered bark as an anthelmintic, by dusting it on skin ailments. The bark also has been reported to be rich in tannin (2). The stems have been used to treat asthma and the seeds are eaten to treat diarrhea. Seed pods are also used to make porridge eaten by humans, while the same seed pods act as a powerful molluscicide and algicide. This plant has been used for many practical purposes - the many branched stems can be used as a barrier or fence, while the wood of this plant is not only a very good firewood, but is also used as a building material for making boxes, poles, planking plywood gun parts, furniture, and house construction (3).

**Height:** 50 - 100 feet

**Width:** 20 - 50 feet

**Growth Rate:** Slow Growing

**Grow Season:** Summer

**Flower Season:** Summer

**Color:** White

**Function:**

**Spread:** Non-spreading

**Allergen:** Non-allergenic

**Invasive:** Benign

**Toxicity:** Benign

**Hardy:** Semi-hardy

**Water Use:** Low water Use

**Resources:**

1. [Sanbi](#)
2. [Plants for a future](#)
3. [Useful Tropical Plants](#)