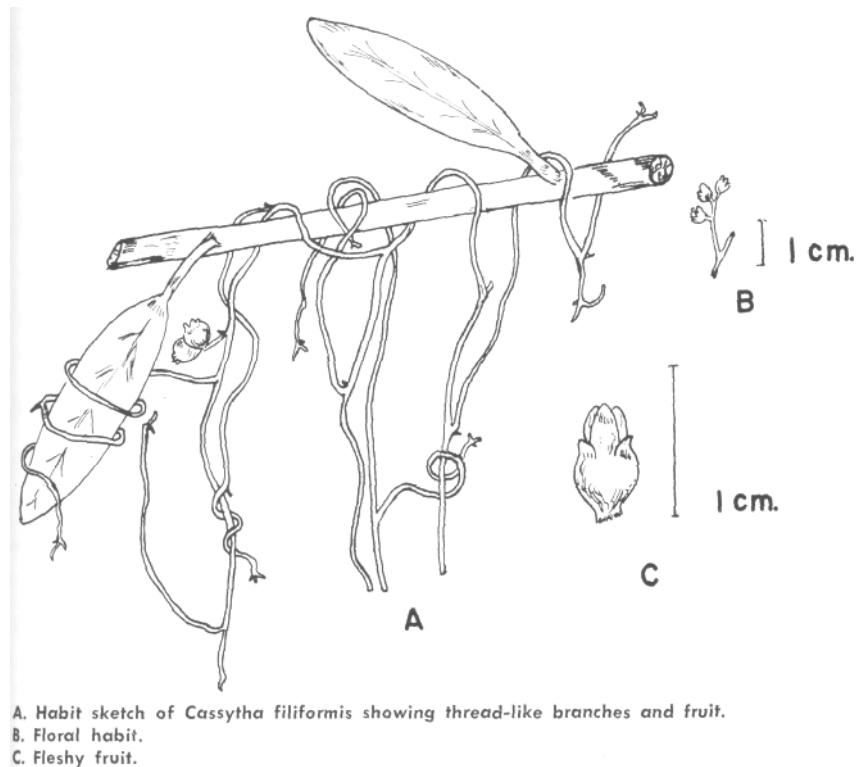


THE STEM PARASITE CASSYTHA FILIFORMIS A BOTANICAL RELATIVE OF AVOCADO

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The majority of genera and species which comprise the botanical family Lauraceae, of which the avocado is a commercially important member, are trees of variable size or woody shrubs or bushes. An unusual botanical relative in this interesting family of tropical and subtropical distribution is the "woevine," *Cassytha filiformis*. This species actually is a vine resembling the common parasitic dodder which is so prevalent in many parts of California and other subtropical and tropical areas of the world. While the habit is almost identical to *Cuscuta*, the floral structure is precisely like *Cryptocarya*, another botanical relative of the avocado, hence the genus is considered a member of the Lauraceae. The genus is chiefly Australian in more or less maritime climates.



The "woevine" is cosmopolitan in the tropics where it sometimes becomes a pest of economic importance as it attaches itself to valuable orchard trees and ornamental

plants with its tough threadlike extensive branchlets. It is a common stem parasite on Lantana Toddalia and certain other plants in South India (6). This plant is unique in the family in that it is a parasite. Because of its particular characteristics and its parasitic habit it is classified in a separate tribe, Cassytheae, within the family Lauraceae and is represented by the single genus *Cassytha* (2) in which 18 species have been described (3). The genus derives its name, *Cassytha*, from the Greek name for *Cuscuta*.

Probably the most important and prominent species is *C. filiformis*, a vigorous saprophytic climber which resembles *Cuscuta* or dodder but with more chlorophyll. The vine is known under several common names throughout the tropics. South Sea Islanders call this vine "*tentanini*" which means "to go round and round," a truly descriptive adjective for its entwining habit (4). Some unusual uses are made of the plant by natives in the Gilbert Islands where the vine is worn on the body by dancers. The smooth orange yellow strands are fashioned as necklaces and head wreaths or may be crossed over the chest and wrapped around the arms. Men are reported to use it in love magic while women use extracts of the vine as a dye to provide a black color for fabrics.

Cassytha ciliolata is known as Devils' Tresses in the Cape region of South Africa where it grows on a number of hosts.

Another closely related species, *C. cuscutiformis*, is known as the Dodder-Laurel in northern Australia. The white clumps of this semi-parasitical vine are said to be edible (1). The plant has been utilized as a seasoning in buttermilk by Brahmans in Southern India (1). The berries are reported to be eaten by boys in Yemen (5).

C. filiformis is a leafless perennial vine with small scales in place of the leaves. It adheres by haustoria which penetrate the epidermis of other plants, hence spreads through the tops of trees and bushes forming long festoons of greenish yellow vines. The individual stems which are copiously branched range from 1 to 3 millimeters in diameter and may attain a length of 10 to 20 feet. The flowers borne the year around are bisexual with a stamen and perianth arrangement very similar to the ordinary avocado. The ovary is first exposed and later becomes enveloped by the enlargement and overgrowth of the calyx tube. Thus the fruit, about the size of a large pea, is closely enclosed by the succulent calyx. The single seed has a membranous testa. The separation between cotyledons is not well defined.

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