

Chapter 20

Vilca (*Anadenanthera colubrina* (Vell.) Brenan Fabaceae)

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ABSTRACT

Anadenanthera colubrina (Vell.) Brenan commonly known as 'vilca' or 'angico' belongs to family Fabaceae (subfamily Caesalpinioideae). It is a South American rainforest tree with a wide geographic distribution, occurring in different biomes in Argentina, Bolivia, Brazil, Paraguay, and Peru at elevations of more than 400 meters. It grows up to 20 meters tall, with its trunk covered in conspicuous thorns as is typical for this species. *Anadenanthera colubrina* is widely used in traditional medicine, with the bark used to treat various diseases such as respiratory problems and inflammations, and seeds in Indigenous rituals with a related species used as a hallucinogen, fodder, in the tanning industry and the wood products utilized in rural constructions, handcrafts, and as an energy source. Phytochemical studies confirmed the presence of phenolic compounds in *A. colubrina*, which are commonly associated with plant pharmacological activity and thus high biotechnological potential. The bark of *A. colubrina* contains catechins, flavonoids, phenols, saponins, steroids, alkaloids, tannins, triterpenes, and xanthenes, as well as a high concentration of polyphenols. The leaves and bark extracts have antimicrobial, anti-inflammatory, antinociceptive, antiproliferative, antifungal, and antibiofilm properties. In terms of toxicity, literature reports that the leaves of *A. colubrina* are toxic when consumed by cattle.