Heliconia rostrata

Parrot peak flower

Scientific classification
Kingdom: Plantae
Clade: Tracheophytes
Clade: Angiosperms
Clade: Monocots
Clade: Commelinids
Class: Liliopsida
Order: Zingiberales
Family: Heliconiaceae
Genus: Heliconia
Species: H. rostrata

Binomial Name
Heliconia rostrata
(Ruiz & Pavon)

Heliconia rostrata is a perennial herbaceous species of the Heliconiaceae family, which lives in the tropical forests of Mexico, Dominican Republic, Belize, Guatemala, El Salvador, Costa Rica, Honduras, Nicaragua, Panama, Brazil, Colombia, Ecuador, Venezuela, Peru, Paraguay, Argentina, Chile and Bolivia. In this last country it is called patujú and, along with the kantuta, it is one of its two national flowers, the Kantuta is a national symbol and the Patuju is also considered a national symbol.[18] The name of the genus derives from the Latin "Heliconius, a, um" = from Helicon, sacred mountain dedicated to Apollo and the Muses, in Greek mythology.

Pharmaceutical uses
Rhizomes of Heliconia rostrata, (family: Heliconiaceae) have been well known for antiophidic property. Ethnobotanically, rhizome of this plant has also been used to cure jaundice, intestinal pain and hypertension. In a study the antioxidant and antibacterial properties were tested. The antioxidant activities of extracts in methanol and ethanol were found to be equal, while the ethanol extract exerted significantly higher antibacterial activity compared to the methanol extract.[19]

Ethnobotanically, Heliconia rostrata (Heliconiaceae) is used for the treatment of skin cancer by the traditional people of Panama.[20] In a study Roy et al. 2019 petroleum ether extracts of rhizomes (RPE) and inflorescence (FPE) of Heliconia rostrata were investigated for their anti-cancer properties. The average score of the estimation showed RPE to be having a stronger anti-angiogenic effect than FPE. Thus, RPE can be used as a candidate for anti-cancer agent and can be further investigated thoroughly for anti-cancer treatment.

Filtration of pollutants
Emerging pollutants appear more frequently in the environment and adverse effects affects not only human health but also the environment. For a study de Oliveira et al. 2019 vertical flow wetland was constructed (VF-CW) planted with Heliconia rostrata using sand as filter media with and without earthworms. The aim was to remove ibuprofen and caffeine compounds.[21] The emerging contaminants removal efficiency in the VF-CW was 97% and 89% for caffeine and ibuprofen, respectively. Inserting earthworms did not show a significant variation in relation to compound removal.

Synthesis of nanoparticles of gold and silver
The silver and gold nanoparticles were biosynthesized using leaves of a pharmacologically important plant Heliconia rostrata. A rapid, eco-friendly, cost-effective and one-step process of synthesis has been achieved.