SI Science International

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News & Comments

# A Rare Fossil Flower and Wasp Entombed Together

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A fly larva is perfectly preserved and concealed in thetiny flower that blossomed 30 million years ago. Researchers have found evidence for their relationship in the tropical ancient ecosystem that they once inhabited by finding this insect and bloom suspended close together. Within one of its spherical seed pods was a minuscule fly larva that may have been intended to feed the wasp's larvae, which were previously unknown to science.

”Mid-Cenozoic flowers in amber from the Dominican Republic reveal Neotropical plant groups that existed on the island of Hispaniola (home to Haiti and the Dominican Republic). Among these, are representatives of the families Fabaceae, Arecaceae, Poaceae, Chrysobalanaceae, Lauraceae, Meliaceae, Burseraceae, Myristaceae, Rhamnaceae and Ticodendraceae.” according to Paleontologist Professor George Poinar Jr. the lead author of the study.

A new species of plant in the family Euphorbiaceae has been identified as Plukenetia minima. What’s special is that The family Euphorbiaceae has over 300 genera, making it one of the most diverse in tropical and subtropical regions globally. For instance, tropical America alone has some 105 genera with 1,800 species, and 65 of these are endemic. *Plukenetia* is one of the endemic genera of the family Euphorbiaceae. it is a pantropical genus of twining vines and lianas.Despite its distinct small size, Plukenetia minima have a long stalk with four different capsules at the tip of the mature female flowers.

*Plukenetia* is the first genus to be found on Hispaniola, as well as its first fossil record. These are some of the rarest fossil flowers. It's possible this wasp played a similar ecological role to modern Euphorbia species (the fossilized plant's living relatives). In 2020, Poinar discovered and named *Hambletonia Dominicana* as a fossilized encyrtid wasp, a parasite known for feeding on the eggs or larvae of smaller insects.

It is not uncommon for unrelated organisms to become entombed together in amber just by accident. Poinar believes that in this case, the wasp was attracted to the flower for nectar or to lay an egg on the capsule containing the fly larva.

**KEYWORDS**

Dominican amber, caribbean, cenozoic, euphorbiaceae, palaeobotany, amber, dominican republic, encyrtidae, euphorbiaceae, flowering plant, hambletonia, hambletoniadominicana, hymenaeaprotera, oligocene, parasitic wasp, plant, plukenetia, plukenetia minima