

## MIMICRY

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We often talk about mimicry with birds or animals who see some gain in this practice and to look more closely we all do it in some form or other to learn the next stage of our development; how much is carried forward genetically is hard to assess in the animal kingdom but in the plant kingdom it is a much more complex ; when trouble strikes they cannot run away and hide; they have to come up with some defensive action against predators who see them as a tasty meal on one hand but need to attract birds and insects to pollinate their flowers and mimicry does play a role here by appearing to be something else which excites the insect or bird to pollinate the flower not to be confused with advertising and the offer of nectar in exchange of pollen ;a fair business affair one could say. Plants will mimic other plants if they believe it to their advantage; a few years ago rice growers were having a major problem with a weed that mimicked the rice plant; it looked the same and produced a seed that was pretty well the same; but the seed was of no value and was detrimental in more ways than one; so genetic engineers developed a rice plant with a pink pigmentation and planted out this new hybrid and within 8 months the rouge weed mimicked the pink colour; what astonished scientists was the short time frame this was achieved One could assume a fluke mutation but one must not under estimate any plants ability to recognize a opportunity to do better at the expense of co existing plants around them How they do it; if we can figure it out would fill a 1000 pages or more and the moral to all this is plants have had over 400 hundred million years to stump up with some pretty clever ideas of survival and to live in harmony with their neighbors' which is something humans have some difficulty in

achieving; suppose having been around for a very short time our intelligence is still at the early development stage and comprehension of life is still about 2% I must not digress [its caused by lack of sugar and the doorbell being constantly rung by religious zealots telling me to repent now or hell and damnation will descend upon me; thought it already done that"""]

The following is a list of different forms of mimicry

Bakerian. This is where female flowers mimic ' .male flowers of their own species; thus cheating pollinators out of a reward.

Dodsonian. Attracts pollinators but no reward; eg. epiphytic orchids

Vavilovian. Where weeds mimic other plants'

Pouyannian. When plants appear to be other organisms; the key stimuli are chemical and tactile; thus being both visual and olfactory.

Chemical. Is a type of biological mimicry ; 2 eg; spiders mimicking sex pheromones of moths in order to catch them.

With plant mimicry they can exude insect alarm pheromones which stops them attacking the plant'

Insects that exploit social insect's societies by duping workers to be nest mates. [Don't woman dab themselves with perfume to attract a mate?]

Parasite cuckoo bees; bombus bohemiensis invade hives of other bumble bees mimicking species pheromones'.

Some seeds from plants are dispersed by ants; this is called myrmecochory; the seeds have a nutritious attachment called elaiosome

which functions as a food reward for ants; in some cases the elaisomes seem to chemically mimic prey brew which in turn manipulates their behavior and maximizes seed dispersal.

Other types of mimicry.

Under water camouflage or deception; transparency; reflection ;counter illumination; counter shading mimesis; self decoration. distraction; disruption of outlines; adaptive coloration.

If one looks around many more would be observed but the one factor that shines out is the lengths plants will go to exploit to survive and thrive.