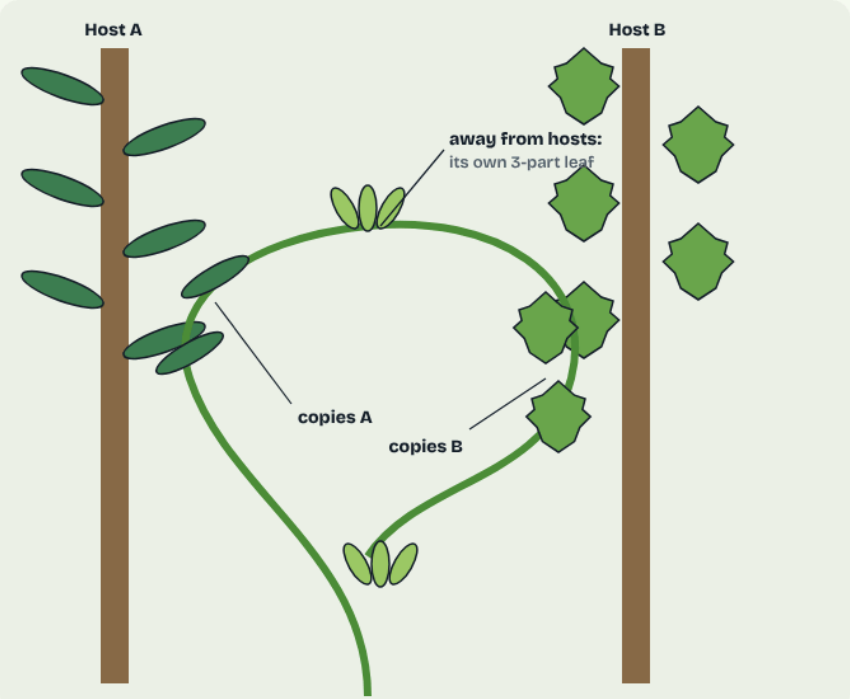
That is why

How does the chameleon vine copy other leaves?

Boquila trifoliolata changes the shape, size and colour of its leaves to match whichever plant it climbs. How is still a mystery.

A One vine, two disguises



Leaves closest to a host copy it most. Parts of the vine about 60 cm away keep their normal shape.

B What can change

Size
some leaves grow up to 10 times bigger

Shape
long, round, lobed or toothed

Colour
from pale to dark green

Veins and spines
patterns and even spine tips

Angle
how leaves sit on the stem

It has copied more than 20 plant species, and no contact is needed: being close is enough.

Likely benefit: plant-eaters may skip leaves that look like a less tasty host.

C How? Three ideas

1 Smell

Chemicals released by the host into the air might carry the signal.

2 Shared microbes

Microbes shared by the two plants might carry genetic instructions.

3 "Plant eyes"

Lens-like cells might sense shapes. A 2022 test with a plastic plant is disputed.

No idea is proven yet. Found in forests of Chile and Argentina.

A climbing plant that dresses like its neighbours, and nobody knows how.

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