

Do iridescent flowers have more pollinating power?

July 6 2011, By RAPHAEL G. SATTER , Associated Press

(AP) -- Scientists are showing off a little-known property of some common garden flowers: They're iridescent, meaning that light shimmers off them like the back of a CD.

University of Cambridge researchers believe the shimmering is aimed at catching the eye of busy [pollinators](#) - saying that bees find the blooms easier to spot and may prefer flashy [flowers](#) over their non-iridescent counterparts.

Bees' preference for shimmery plant petals may be long-standing, but the phenomenon has been relatively little-studied until now. Cambridge said iridescence in plants was first formally identified in hibiscus flowers in 2009, something researcher Silvia Vignolini said might be due to an interesting piece of science hiding in plain sight.

"Trivial things, sometimes nobody takes care of them," she said at the opening Tuesday of the Royal Society's summer science exhibit in central London. "It's weird that after all this time you can discover something new about flowers."

Flowers become iridescent through minuscule striations on their surface. Those diffract light and alter the way an object looks depending on the angle at which it is observed.

The sparkly or shimmery effect is particularly noticeable on the back of a CD, whose micro-grooves work the same way, but it's common in

nature as well.

Opals are iridescent, as are various species of insects such as some beetles or butterflies. It's also common in birds, particularly [hummingbirds](#), whose delicate throat feathers shine brilliantly.

But until recently iridescence in plants was overlooked. Part of it might be because the shimmering in the darkly colored petals of Queen of the Night tulips isn't as dramatic as the powerful blue of Morpho butterflies, which can be seen more than half a mile away.

In the case of Blazing Star wildflowers, the plants' iridescence is visible in parts of the spectrum - such as the ultraviolet range - which can be seen by bees but not by humans.

Cambridge's exhibit on iridescent flowers was one of several scientific advances being shown this week at the Royal Society's exhibit. Others included a display on invisibility and a machine built to recognize facial expressions.

Visitors can inspect an airport security device, see what it'd be like to wear bionic glasses, or try their hand at using a 500,000-pound (\$800,000) surgical device to thread a catheter through a glass heart.

More information: The Royal Society's Summer Science Exhibit: <http://royalsociety.org/Summer-Science/>

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