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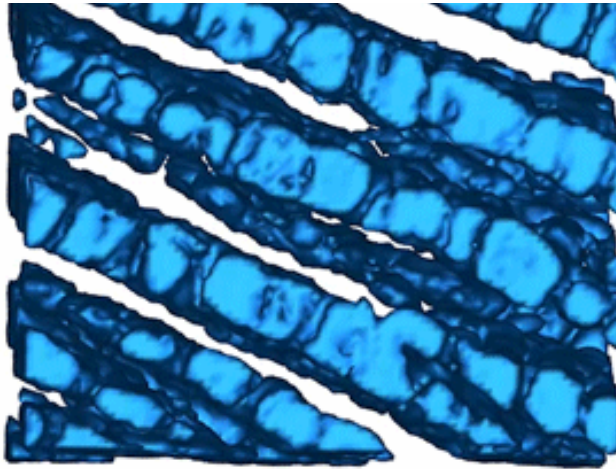


ROX MIDDLETON

The secret to this fruit's mysterious blue color

By [Charlotte Hartley](#) | Aug. 6, 2020 , 11:00 AM

With their dazzling metallic hue, the blue fruits of the laurustinus shrub (*Viburnum tinus*), a flowering plant popular in gardens across Europe, are a sight to behold. But it's what lies beneath the surface that's caught the attention of scientists in a new study.

MIDDLETON ET AL., *CURRENT BIOLOGY* 2020

Researchers viewed samples of the fruit tissue through an electron microscope to examine their internal structure. They found no blue pigment as is typical in other blue fruits such as blueberries—just layers and layers of blobs. These blobs turned out to be **tiny droplets of fat, arranged in a manner that reflects blue light**—a phenomenon known as “**structural color**”—the team reports today in *Current Biology*.

Below the fat droplets lies another layer of dark red pigment, which absorbs any other wavelengths of light and intensifies the blue shade. The team verified these findings using computer simulations, confirming that this type of structure can indeed produce the precise shade of blue seen in the laurustinus.

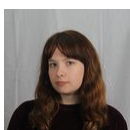
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The striking color of laurustinus fruits may signify its high fat content to birds. Although structural color is well-documented in animals, including in vibrant peacock feathers and delicate butterfly wings, it is rarely observed in plants. What’s more, this is the first time that fats have been found responsible for this mechanism. The team suspects it may be more widespread, and hopes to identify this type of structure in other species.

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