True Blue

Bowls, ritualistic objects—even people—were painted a brilliant turquoise blue before being offered up as sacrifices by the Maya, the original residents of the Yucatán Peninsula. Now, 14th century pottery recovered from an ancient sacrificial well reveals just how the Maya created the blue pigment.

The Maya started using the pigment known as "Maya blue" about 500 C.E. Researchers knew that its ingredients included indigo and the clay mineral palygorskite, but the rest of the preparation process was unknown. Studies of a Maya bowl found at the bottom of the Sacred Cenote, a famous sacrificial well in Chichén Itzá, showed traces of a resin incense called copal. Researchers now believe that when heated, the copal fused the indigo and palygorskite together, producing the long-lasting blue pigment.

Archaeologist Dean Arnold of Wheaton
College in Wheaton, Illinois, came across the
bowl, which had originally been uncovered
in 1904, while examining collections at
the Field Museum in Chicago. In Maya culture, each of the three ingredients had healing
power, says the Field Museum's Gary Feinman. "The
Postclassic Maya appear to have used this pigment as
a key component in rituals that petitioned for rain to heal
the Earth from drought and desiccation," he says. Arnold's team

reported the findings online 26 February in the journal Antiquity.

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