



This moth, *Neopalpa donaldtrumpi*, was named after the former U.S. president.

## TAXONOMY

# Should beetles be named after Adolf Hitler?

Zoologists debate whether—and how—to change scientific names now deemed offensive

By **Rodrigo Pérez Ortega**

In 1934, a German paleontologist named a giant flying insect from the Carboniferous period *Rochlingia hitleri*, after Adolf Hitler, who had just taken power in Germany, and Hermann Röchlign, an anti-semitic steel manufacturer and member of the Nazi Party. Three years later, an Austrian amateur entomologist named a brown, eyeless beetle from Slovenian caves *Anophthalmus hitleri* because he admired Hitler. In recent years, neo-Nazis have reportedly paid thousands for specimens, pushing the beetle toward extinction.

Some researchers have argued for years that *A. hitleri* and other species names, including the many that honor racists and colonizers, are offensive and should be changed. A few societies have taken steps toward doing so. But not the International Commission on Zoological Nomenclature (ICZN), and its stance has ignited fierce debate.

In January, the commission, which arbitrates on the correct use of scientific names of animals, announced in the *Zoological Journal of the Linnean Society (ZJLS)* that it will not consider changing animal names many researchers consider offensive. “If these names are not stable, you can create a massive confusion,” explains ICZN Commissioner Luis Ceriaco, a biologist at the University of Porto. But on 23 August, a series of editorials in the same journal pushed back, saying the decision was made without feedback from the community and wrongly prioritized tradition over ethics. It’s a matter of “eliminating the commemoration of people who

caused untold human misery,” says one author, botanist Estrela Figueiredo of Nelson Mandela University’s Ria Olivier Herbarium. “In which other spheres of human endeavor is anything still named [after] Hitler? ... The codes must change and adapt, like the rest of society.”

Names identified as problematic include *Hypopta mussolinii*, a butterfly discovered in Libya and named after Benito Mussolini, the fascist Italian leader who invaded the country. And sometimes, organisms are named apparently with intent to mock: In 2017, researchers named a moth with pale blond head scales and small genitalia *Neopalpa donaldtrumpi*.

The ICZN commissioners, who are in charge of the International Code of Zoological Nomenclature, argued in January that renaming animals because of cultural offense



Researchers argue that *Anophthalmus hitleri* needs a new scientific name.

would disrupt the code’s chief goal: stability. Scientists would then use more than one name to refer to the same species.

But the editorial authors disagree. “We cannot prioritize stability over social justice,” counters Marcos Raposo, an ornithologist and taxonomist at the National Museum of the Federal University of Rio de Janeiro, author of another editorial.

Debate over scientific names erupted earlier among botanists, who have traded editorials and letters over the past 2 years. Some pushed to restore Indigenous species names and change offensive ones, such as *Hibbertia*, a large genus of Australian guinea flowers that honors English anti-abolitionist and plantation owner George Hibbert. A few botanists proposed getting rid of eponyms honoring humans altogether. Other researchers pushed back, saying the nomenclature shouldn’t be biased by social concerns.

The discussion got heated, but “the botanical community is trying really hard to be grown up about this,” says botanist Sandra Knapp of the Natural History Museum (NHM) in London. She is also president of the nomenclature section of the 2024 International Botanical Congress in Madrid, and notes that the naming code for plants, animals, and fungi allows voting by members: At the meeting in July, botanists will vote on a proposal to allow existing culturally offensive names to be changed and to form a committee to do so.

As for animals, some scientific societies have already moved to change common names that give offense. In 2022, for in-

stance, the Entomological Society of America adopted spongy moth for the invasive moth *Lymantria dispar*, getting rid of gypsy moth. But the ICZN commissioners argue scientific names are a bigger challenge.

They estimated in the January statement that about 20% of the more than 1.5 million animal names are eponyms and about 10% are toponyms, referring to a place. That suggests that several hundred thousand scientific names could be challenged on ethical grounds. Adjudicating the challenges and deciding on new names would be a nearly impossible task, Ceriaco says.

In a third editorial, Christopher Bae, a paleoanthropologist at the University of Hawaii at Manoa, and colleagues suggested creating a special ethics committee to revise names, thus spreading the workload. But that's beyond the commission's scope, Ceriaco says. "None of us were elected to be commissioners [because of our] expertise on ethics," he says. "We are experts on nomenclature and taxonomy."

Figueiredo, Raposo, and others argue that ICZN should invite outside views. "They should ask our opinion," Raposo says, and give priority to members of historically oppressed groups. He and other critics note that most ICZN commissioners are white and based in the Global North. None is from Africa, where about 1500 vertebrate species have eponyms, many reflecting the continent's history of imperialism.

Keeping names with racist slurs denies dignity to marginalized communities, agrees paleontologist Anjali Goswami of NHM. She is also the president of the Linnean Society, which publishes *ZJLS*. "There are ways that we can at least start to make some progress on the worst offensive [names] and then move towards a better practice."

For example, for plants, Figueiredo and Gideon Smith, also at Nelson Mandela University, say some offensive names could be eliminated in a single stroke, by removing the "c" in about 300 botanical names from Africa with the roots *caff[e]r-* and *caffl[e]r-*. The one-letter change would transform an allusion to a now illegal, Apartheid-era slur used to discriminate against Black people in South Africa to *affer-*, implying a species origin in Africa. The change would cause little disturbance to the nomenclature, the researchers say. "The ICZN needs to be receptive to proposals for change," Figueiredo says.

ICZN acknowledges the troubled past of some names, and will take note of the concerns now published, Ceriaco says. "It's good for us to now read and absorb what the community is discussing." As for *A. hitleri*, given that the beetle's current name threatens its survival, Ceriaco says, ICZN might consider giving it a new one. ■

## U.S. SCIENCE POLICY

# Researchers applaud HHS push to ease cannabis restrictions

### Proposed rescheduling would make it easier for scientists to acquire and study the drug

By **Phie Jacobs**

Federal health officials are urging the U.S. Drug Enforcement Administration (DEA) to loosen its restrictions on cannabis—a move that could make it easier for researchers to study the drug's potential medical benefits and harms. Following a review initiated by the White House in 2022, the U.S. Department of Human Health and Services (HHS) last week recommended that DEA reclassify cannabis from its Schedule I category, which includes drugs considered to have a high potential for abuse and no accepted therapeutic value, such as heroin and LSD, to the lower risk Schedule III. If implemented, the policy change could relax lengthy licensing and handling procedures that scientists say have hampered research.

"This is a really unprecedented situation," says biopsychologist Ziva Cooper, director of the Center for Cannabis and Cannabinoids at the University of California (UC), Los Angeles. Nearly half of U.S. states have legalized recreational cannabis, and medicinal use is permitted in many more. Now, after decades of resisting calls from scientists and activists to reschedule the drug, DEA faces new pressure to do so.

The HHS recommendation, sent to DEA in a letter first reported by Bloomberg News, would place cannabis in the same category as ketamine and anabolic steroids, which are used in health care settings and can be obtained with a prescription. (A DEA spokesperson told Bloomberg the agency had received the letter and will now initiate its own review process.)

Cannabis has shown promise in relieving chronic pain and is being explored as a possible treatment for cancer, post-traumatic stress disorder, and other conditions. "From a medical perspective, it fits better" in Schedule III, says psychiatrist Igor Grant, director of the Center for Medicinal Cannabis Research at UC San Diego.

Scientists who study cannabis have long chafed under DEA policies. The Schedule I classification "makes everything more challenging," says neuroscientist Staci Gruber, who runs trials involving cannabis at

McLean Hospital in Massachusetts. A 2022 law increased access to cannabis for medical research (*Science*, 9 December 2022, p. 1035), but scientists must still apply for a DEA license—a process that requires months of paperwork and must be repeated for each new study. Rescheduling would streamline the process. For example, a research manual published by DEA indicates that scientists working with Schedule III substances aren't required to submit their study protocols to the agency in advance.

Researchers also expect an easing of security rules for storage and handling, which currently require them to use high-tech lock boxes and expensive security cameras.

The proposed change could increase the supply of cannabis for research. Currently, DEA only permits a few universities and companies to produce the plant. Obtaining a permit means investing in a complicated security system and hiring trained guards, says George Hodgkin, CEO of the Biopharmaceutical Research Company, which provides cannabis to researchers. Rescheduling wouldn't produce "an overnight sea change," he says, but it could loosen the requirements enough to bring in more suppliers.

The DEA manual also notes that researchers working with substances in Schedules II through V can apply to produce small quantities of product rather than purchasing it from an approved facility.

Whether DEA will approve HHS's recommendation isn't clear. But it often defers to HHS on scientific and medical matters, notes attorney Larry Houck, who spent 15 years as a DEA diversion investigator.

In the meantime, researchers have a slew of questions about cannabis to address. "We're still a long way from having enough empirically sound data" to support its therapeutic benefits, Gruber says. Its growing availability has made research more urgent. According to the U.S. Centers for Disease Control and Prevention, one in five Americans used the drug in 2019, and new cannabis products, some with a high tetrahydrocannabinol content, are flooding the market. "We have a responsibility to try to understand the ways in which [people] may use it more responsibly," Gruber says. ■



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