

# Lick a frog for the sake of science

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Published: December 11, 2008 6:18 AM

Updated: December 11, 2008 1:10 PM

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Frogs come in all sizes, colours, and apparently, flavours.

When I think of modern-day scientists I picture them with access to a wealth of portable techno gadgets. I never considered a scientist in the year 2008 resorting to using her tongue as an instrument to detect poisonous frogs, but such is the case. Valerie Clark, who holds a master's degree from Columbia University in New York, admits to having licked a toad or two in her time.

"I don't recommend this," Clark told National Geographic News earlier this year. "If you lick the wrong frog it can be very bad."

Apparently the more toxic the frog, the more bitter he tastes. Frog samplers can experience anything from a burning, constricted throat to death.

You have to wonder what goes on behind the scenes in the name of frog science.

"Ok George, you're up."

"No . . . please. I beg you. I have a wife and kids."

"C'mon, just a quick lick, George and it will all be over."

"That's what I'm afraid of. Please, don't make me do it."

"In the name of science, George, just lick the frog."

Something tells me frog licking was the furthest thing from little George's mind the Christmas he got his first chemistry set and decided he wanted to become a scientist.

John Daly, a frog toxin expert and scientist emeritus at the National Institutes of Health pointed out that while fellow scientists do lick frogs while in the field, he, for one, does no such thing.

"I press them very hard on the back to get some secretions, and then I taste my finger — cautiously," he said.

Even so, it doesn't take a frog scientist to figure out that licking poison off your finger is still licking poison — even if you do it cautiously.

Some species, such as the tiny golden dart frog, pack enough poison to kill several people.

The good news is that experienced biologists recognize the highly toxic frogs and tend to keep them off their tongues. It's the non-toxic frogs that try to mimic the appearance of their deadly relatives that arouse their curiosity and inspire the taste test.

Isn't there a safer way to test the frogs? Yes, but according to Clark, tasting frogs in the field saves having to transport them back to the laboratory for more conventional testing.

You have to admire that kind of dedication to research.

Unfortunately it's not just scientists who are willing to put their tongues on the line when it comes to toads.

Apparently certain toad species secrete a substance called bufotenine which has hallucinogenic properties making them attractive to those looking for a high. This would certainly explain all those fairy tales. Maybe the princess wasn't so much kissing as she was licking and sadly, in the end, Prince Charming was merely a hallucination.

If Valerie Clark has had any episodes involving carriages or men in purple velvet tights she isn't talking.

What she is talking about is finding important chemicals that further medicine while proving we need to save our planet if we want to save ourselves. Enough said.

If you want to find out more about a day in the life of a frog scientist go to [nationalgeographic.com](http://nationalgeographic.com) and type Valerie Clark into their search engine. You won't need to lick a frog to find it a fascinating view.

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