

On October 5, 84-year-old Chinese scientist Tu Youyou earned the Nobel Prize for medicine, almost 50 years after she discovered [artemisinin](#)—otherwise known as “humankind’s best defense” against malaria.



During the Vietnam War, thousands of servicemen and women lost their lives to the mosquito-borne illness ([over 40,000 cases in Army troops alone between 1965 and 1970, according to the U.S. Department of Veteran Affairs](#)).

So many Vietnamese soldiers were dying in the tropical pest breeding ground that North Vietnam leader Ho Chi Minh urged Chinese Premier Zhou Enli to help develop a malaria cure. Chairman Mao subsequently organized [Project 523](#), a covert program to manufacture new antimalarial medications which Tu soon joined.

She was first dispatched to Hainan—an island province in China’s southernmost point—to

study malaria-infected patients. Meanwhile, her husband was one of the 17 million people exiled to rural land during the [Up to the Mountains and Down to the Countryside Movement](#) in China in the late 1960s—a policy enacted for privileged urban youth to learn from, live and work with farming villages. Their daughter was sent to live in a nursery.



In 1969, Tu was appointed head of Project 523. She and her crew foraged ancient collections of traditional Chinese medical texts and compiled a recipe of their own. It was in [The Manual of Clinical Practice and Emergency Remedies by Ge Hong of the East Jin Dynasty](#) that they found evidence of sweet wormwood (*Artemisia annua*) used to treat malaria.

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“The team isolated one active compound in wormwood, artemisinin, which appeared to battle malaria-friendly parasites,” [the BBC detailed](#). “[They] then tested extracts of the compound but nothing was effective in eradicating the drug until [Tu] returned to the original ancient text.”



Artemisinin plant

“After another careful reading, she tweaked the drug recipe one final time, heating the extract without allowing it to reach boiling point.” She even volunteered to test the medicine on herself first, claiming—as head of the research group—she had the “responsibility.”

And yet, *as [The Guardian reported](#)*, “for all her achievements, Tu [...] remains a little known figure, even in her native China where she had drifted into obscurity despite the magnitude of her discovery.”

She's been called an “[outlier](#)” of China's scientific society, as well as the “three noes winner”: no medical degree, no doctorate, and no international research to her name. But she is also the first Chinese woman to win a Nobel Prize.

Perhaps, from now on, we'll remember her name.

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