

AUTHOR: GAVIN ALLEN

PUBLICATION DATE: 01.11.12

ARCHIVED FOR EDUCATIONAL PURPOSES FROM:

<http://www.dailymail.co.uk/sciencetech/article-2085193/Tobacco-traces-Mayan-flask-proves-race-did-smoke.html>

COPYRIGHT REMAINS WITH GAVIN ALLEN AND THE DAILY MAIL

ARCHIVED BY MODERNSNUFF.COM

TRACES IN MAYAN FLASK PROVE THEY USED RUSTICA TOBACCO

The first hard evidence that the ancient Mayans smoked has revealed tobacco so strong it was virtually 'hallucinogenic'.

Tobacco traces were discovered inside a 1,300-year-old Mayan flask which effectively had 'tobacco' written on it in hieroglyphs.

However, the tobacco detected in the 'very small' flask may not have been used for smoking.

While the flask is likely to have stored tobacco leaves, the Maya also ground tobacco into a powder from which they could make a powerful alcoholic drink, snort like snuff or even use as snake repellent.

'This was very strong tobacco, much stronger than it is today,' Jennifer Loughmiller-Newman, an archaeologist at the University of Albany in New York, told MSNBC.

'Nicotiana rustica was nearly hallucinogenic.'

'My guess is that it would have been used for treatment of bug bites, or to ward off snakes, or perhaps as a snuff.'

The flask, which dates to around the year 700, was made in what is now Mexico's southern Campeche state.

The phrase "y-otoot 'u-may," written on the vessel, translates as 'the house of his/her tobacco.' However, that didn't necessarily mean it had been used for that purpose.



Smoking pot: This Mayan flask from around 700AD has been proved to have contained tobacco, matching the hieroglyph on the front which translates roughly as 'House of his/her tobacco'

'Investigation of food items consumed by ancient people offers insight into the traditions and customs of a particular civilization,' said Loughmiller-Newman.

'Textual evidence written on pottery is often an indicator of contents or of an intended purpose; however, actual usage of a container could be altered or falsely represented.'

While there has been pictorial and textual evidence that the Maya smoked tobacco in large pipes or early cigars, this is the first time it has been proved with chemical evidence.

Doing so before has been so difficult because ancient vessels often contain traces of other substances that can mask its original purpose, such as iron oxide, which was used for burial rituals.

The research, published in *Rapid Communications in Mass Spectrometry*, was led by Loughmiller-Newman and Dmitri Zagorevski, a biochemist at Rensselaer Polytechnic Institute.

The pair analyzed samples from the flask, which is now part of the Library of Congress' Kislak Collection, using gas-chromatography mass spectrometry and liquid-chromatography mass spectrometry.

'Our study provides rare evidence of the intended use of an ancient container,' said Zagorevski.

'Mass spectrometry has proven to be an invaluable method of analysis of organic residues in archaeological artifacts.

'This discovery is not only significant to understanding Mayan hieroglyphics, but an important archaeological application of chemical detection.'



Previous evidence: Mayans had long been suspected of smoking tobacco because of evidence passed on pictorially, in murals such as this, and in text.



Mayan Ruins: The race likely made the flask in around the year 700, during the Late Classic Maya period of AD 600-900.