

# Captain Cook and the Manchineel Tree.

## Did he encounter the deadly Manchineel or another species with similar traits?

The Manchineel Tree, *Hippomane mancinella*, is listed in the Guinness Book of Records as the *World's Most Dangerous Tree*. Every part of the tree is extremely hazardous, including the sap from branches and leaves, the apple-like fruit, even the smoke from burning wood. If you search *Manchineel* on the internet, you will invariably find various historical accounts.

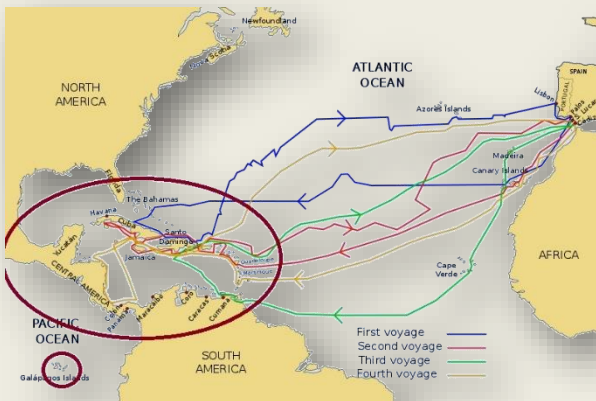


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## Manchineel in the Caribbean and Christopher Columbus

The earliest European record of Manchineel was written by Spanish doctor, Diego Alvarez Chanca who accompanied Christopher Columbus on his second voyage to the New World in 1493. In the first written document describing the flora and fauna of America, he described the Manchineel Tree:

*There were wild fruits of various kinds, some of which our men, not very prudently, tasted; and on only touching them with their tongues, their mouths and cheeks became swollen, and they suffered such a great heat and pain.*



Voyages of Christopher Columbus to the Caribbean, with distribution of Manchineel Tree marked in red.

Map of voyages: Viajes\_de\_colon.svg:

Phirosiberiaderivative work: Phirosiberia, CC BY-SA

The Spanish called it *La Manzanilla de la Muerte* - Little Apple of Death. The tree was well known to the Carib, the indigenous people of the region, who, for aeons prior to the arrival of Europeans, used leaves to poison the water of their enemies and sap to poison the tips of their arrows. Every voyage made by Columbus to the New World took him to locations where the Manchineel grew.

## Manchineel in the Pacific and Captain James Cook

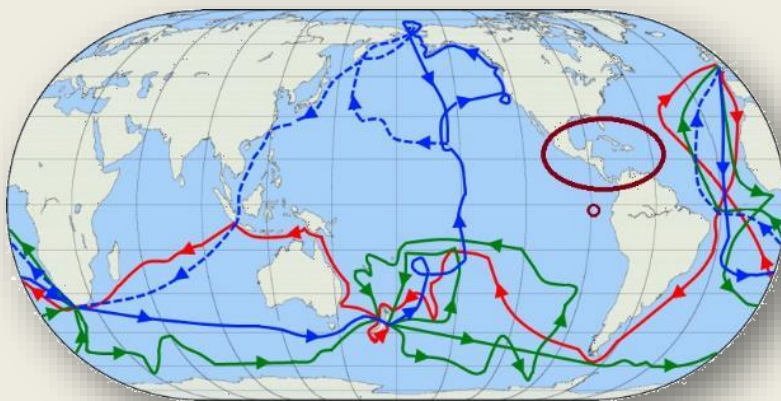
Also on the internet, you will inevitably find numerous references to Manchineel quoting William Ellis, ship's surgeon (actually *surgeon's mate*) on Captain James Cook's 3<sup>rd</sup> and final voyage. Ellis wrote:

*"On the fourth, a party of men were sent to cut wood, as the island apparently afforded plenty of that article; amongst other trees they unluckily cut down several of the **manchineel**, the juice of which getting into their eyes, rendered them blind for several days."*

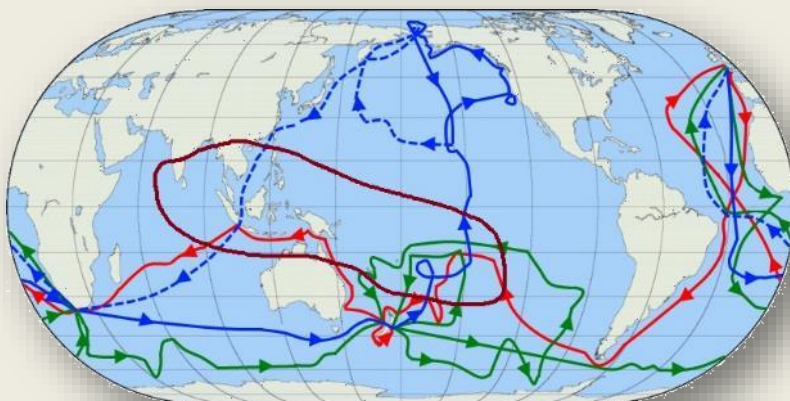
But is this true? When did Cook come close enough to the Caribbean, the Galapagos, or the west coast of Central and northern South America to encounter Manchineel? Well, the answer is, he didn't! The reference quotes from Ellis, 1783, page 60: *An Authentic Narrative of a Voyage Performed by Captain Cook and Captain Clerke, in His Majesty's Ships Resolution and Discovery, During years 1776, 1777, 1778, 1779 and 1780....*

The link on various web pages related to Manchineel will take you to *Volume II* of William Ellis' diary but you won't find mention of *Manchineel* there. It's on page 60 of *Volume I*. The wood cutting described by Ellis took place on *Anamooka*, known these

days as *Nomuka*, an island of the **Ha'apai** group of Tongan islands. Captain James Cook **never** ventured anywhere near the Caribbean and the known distribution of *Manchineel*, *Hippomane mancinella* trees.



Voyages of Captain James Cook. Third voyage in blue. Maroon marks the distribution of Manchineel, *Hippomane mancinella*. Map: Jon Platek. Blank map by en:User:Reisio., CC BY-SA 3.0, via Wikimedia Commons



Voyages of Captain James Cook. Third voyage in blue. Maroon marks the distribution of the Milky Mangrove, *Excoecaria agallocha*. Map: Jon Platek. Blank map by en:User:Reisio., CC BY-SA 3.0, via Wikimedia Commons

So, what were the trees that inflicted *Manchineel*-type injuries on Cook's men? With help from David Maberley, we have tracked down the most *likely suspect*, *Excoecaria agallocha*, *Milky Mangrove*, *Blind-Your-Eye Mangrove* or *River Poison Tree*, a tree widely distributed in mangrove forests of India, south-east Asia, **northern Australia**, and *islands of the south-western Pacific, including Tonga*.





*Excoecaria agallocha* Photo: J.M.Garg, CC BY-SA 4.0, via Wikimedia Commons

So Captain Cook and his men did not encounter the *Manchineel*, *Hippomane mancinella* of the Caribbean, rather the mangrove, *Excoecaria agallocha*, widespread in both the Indian and Pacific Oceans, a mangrove which inflicts similar injuries to the *Manchineel* of the Caribbean. The two trees are related, both belong to the Euphorbiaceae family, and both have particularly malevolent chemical defenses.

So, there are salutary lessons to be learnt. Firstly, be careful using common names. *Manchineel* in the Caribbean is not the same as *Manchineel* in the Pacific. Secondly, don't believe everything you read on the internet!

Ellis W. 1783. *An Authentic Narrative of a Voyage Performed by Captain Cook and Captain Clerke, in His Majesty's Ships Resolution and Discovery, During Years 1776, 1777, 1778, 1779, and 1780: In Search of a Northwest Passage Between the Continents of Asia and America, Including a Faithful Account of All Their Discoveries, and the Unfortunate Death of Captain Cook.*

Guinness World Records:

<https://www.guinnessworldrecords.com/world-records/most-dangerous-tree>

Linnaeus, Carl von. 1753. *Species Plantarum* 2: page 1191.

Wikipedia: <https://en.wikipedia.org/wiki/Manchineel>

Wikipedia: [https://en.wikipedia.org/wiki/Excoecaria\\_agallocha](https://en.wikipedia.org/wiki/Excoecaria_agallocha)

de Ybarra A M. 1906. A forgotten medical worthy, Dr. Diego Alvarex Chanca, of Seville, Spain, and his letter describing the Second Voyage of Christopher Columbus to America. *Med Library Hist. J.*, 4(3):246-263.



*Excoecaria agallocha* Photo: Dinesh Valke from Thane, India, CC BY-SA 2.0, via Wikimedia Commons

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