

导读:最新研究显示,距今约1万年前,水稻在长江下游地区开始驯化,这进一步确立了中国早期水稻驯化在世界农业起源中的地位。

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Questions surrounding the origin and domestication of rice have led to a lot of debate in the last decade.

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Rice remains have previously been recovered from the Shangshan site in the Lower Yangtze of China and recognized as the earliest examples of rice cultivation. However, the age of the rice fossils was derived through radiocarbon dating of organic matter in pottery shards, which can be contaminated with older carbon sources, Lu said.

[illegible]

To constrain the age of the phytoliths, the researchers developed new ways of isolating rice phytoliths from carbon sources, such as clays and carbonate, and dated the samples directly using radiocarbon dating. It turned out that phytoliths retrieved from the early stage of the Shangshan site are about 9,400 years old.

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Further studies showed that approximately 36 percent of rice phytoliths at Shangshan had more than nine fish-scale decorations, less than the approximately 67 percent counted from modern domesticated rice, but larger than the approximately 17 percent found in modern wild rice.

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That means that rice domestication may have begun at Shangshan at about 10,000 years ago during the beginning of the Holocene, when taking into account the distance between phytolith samples and the lowest bottom of cultural strata of the site as well as a slow rate of rice domestication, Lu said.

[illegible]

The time coincided with the domestication of wheat in the Near East and maize in northern South America, both of which are also believed to have occurred at about 10,000 years ago, when the global climate experienced dramatic changes from cold glacial to warm interglacial.

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