Seminar

Origins of sweet potato and bottle gourd in Polynesia: pre-European contacts with South America?

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Wednesday, April 15th – 3:00 pm. Phureja Room

This presentation will be delivered in English, but the slides will be in Spanish.

Abstract:

It has been suggested that both the sweetpotato (camote) and bottle gourd (calabaza) were introduced into the Pacific by Polynesian voyagers who sailed to South America around AD 1100, collected both species, and returned to Eastern Polynesia.

For the sweetpotato, this hypothesis is well supported by archaeological, linguistic and biological evidence, but using molecular genetic techniques we are able to address more specific questions: Where in South America did Polynesians make landfall? What were the dispersal routes of the sweetpotato within Polynesia? What was the influence of the Spanish and Portuguese sweetpotato introductions to the western Pacific in the 16th century?

By analysing over 300 varieties of sweet potato from the Yen Sweet Potato Collection in Tsukuba, Japan using high-resolution DNA fingerprinting techniques we are beginning to elucidate specific patterns of sweetpotato dispersal.

This presentation will also include discussion of the Polynesian bottle gourd, and our efforts to determine whether it is of South American or Asian origin. Understanding dispersal patterns of both the sweetpotato and bottle gourd is adding to our knowledge of human movement in the Pacific. It also shows how germplasm collections such as those maintained by the International Potato Center can be used to answer important anthropological questions.