

Oral presentation

Biosprospection during early colonial Mexico and its historical consequences: an example of ornamental plants.

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Introduction. Over 3,000 plants were documented by the first Royal Expedition to New Spain (1570-1577) under the direction of Francisco Hernández. As Protomédico de Todas las Indias, Islas y Tierra Firme del Mar Océano of King Phillip II, he was charged with documenting the medicinal plants of Spain's American Empire. Through out the 24 books of his *Historia Natural de la Nueva España* (HNNE), Hernández referred to plants cultivated as ornamentals and their worthiness for introduction to the royal gardens.

Objectives. To make an inventory of the prehispanic ornamental plants in central Mexico during the early colonial period and to evaluate their subsequent development around the world.

Methods. Plants were selected as ornamental based upon terms associated with gardens and the plants' attractiveness in the HNNE. Common names, morphological features and ecological characteristics were used to make taxonomic determinations. Historical and contemporary horticultural documents, taxonomic monographs, and herbarium specimens were used to trace the history of these species in European and American gardens and in the Mexican flora.

Results. Of the 51 plants recorded as ornamentals, to date 21 have been identified taxonomically. Two centuries later, 16 of them were revalidated by a later Spanish Royal Expedition. Of 21 species, 85% are still cultivated internationally. Five of these species are the result to Hernández' early introductions. Other Mexican species (e.g., *Dahlia pinnata*) became established in Europe and North America after 1800 as a consequence of plant exploration and introduction by foreign botanists and horticulturalists. Wild ancestors of two species are unknown today from natural populations.

Conclusion. The first Spanish royal bioprospecting commission conducted by Francisco Hernández also targeted plants of non-medical interest, in particular ornamentals destined for the royal gardens in Spain. Five of the 21 identifiable horticultural plants grown today can be directly attributed to Hernández, while another 12 were introduced by subsequent European explorers over two centuries later. Three prehispanic Mexican ornamental plants have not been integrated into the global horticultural flora.

Keywords: New Spain, Francisco Hernández, gardens, Sessé & Mociño Expedition

Selected References

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