

Maria Sibylla Merian (1647-1717)

Maria Sibylla Merian is credited as the first European to directly document observations about insects. A German entomologist, naturalist, and scientific illustrator, Merian came from a long line of engravers and had an innovative style of representing insects in a naturalistic context.

Merian published her first book of natural illustrations in 1675. In 1699, she led a self-funded scientific expedition to Dutch Surinam (modern day Suriname) to study tropical insects and their native plants, the first woman to do so. Her findings, which included information on the medicinal use of plants and animals, were published in *Metamorphosis Insectorum Surinamensis (The Transformation of the Insects of Suriname)* in 1705. The work was revolutionary as Merian used Indigenous plant names that then became used and accepted in Europe. It was also the first work of its kind on Suriname.



Perhaps Merian's biggest contribution to the field of ecology was the idea that insects hatch from eggs. It is said that her study of insects became the foundation for the development of the field of entomology. She is credited with inventing the concept of studying species throughout their entire life cycle. She also observed how plants impact each stage of change from caterpillar to butterfly as well as the benefits of insects to certain plants. Her research included how butterflies and cockroaches affect crops and agriculture. These observations have evolved to the practice of releasing beneficial insects to help with pest management, a practice we use right here at New England Botanic Garden.

ABOUT THE ARTIST | Sigrid Knemeyer

Sigrid Knemeyer is a multifaceted artist and illustrator based in the Boston MetroWest area and known for her unique integration of art and science. She holds a Master of Science in Medical Illustration from the Medical College of Georgia and a Bachelor of Fine Arts from the University of Idaho, along with training at the Florence Academy of Art in Italy. As the founder of SciStories, a creative agency specializing in health and science communication, Sigrid has contributed her artistic vision to esteemed publications such as *Science*, *Nature*, and *Cell*. Before establishing her own business, she honed her skills as a visual designer at the Broad Institute of MIT and Harvard, where she developed a deep understanding of conveying complex scientific concepts through compelling visuals.

Spanish translation coming soon.