Carolus Linnaeus (Carl von Linné), 1707-78: The Swede Who Named Almost Everything

Charles T. Ambrose
University of Kentucky, cambros@uky.edu

Follow this and additional works at: http://uknowledge.uky.edu/microbio_facpub
Part of the History of Science, Technology, and Medicine Commons, and the Medical Humanities Commons

Repository Citation
Ambrose, Charles T., "Carolus Linnaeus (Carl von Linné), 1707-78: The Swede Who Named Almost Everything" (2009). Microbiology, Immunology, and Molecular Genetics Faculty Publications. 51.
http://uknowledge.uky.edu/microbio_facpub/51

This Article is brought to you for free and open access by the Microbiology, Immunology, and Molecular Genetics at UKnowledge. It has been accepted for inclusion in Microbiology, Immunology, and Molecular Genetics Faculty Publications by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.
Carolus Linnaeus (Carl von Linné), 1707-78: The Swede Who Named Almost Everything

Notes/Citation Information
Published in Transylvania Treasures, v. 2, no. 2, p. 4-5.

© 2009 Transylvania University

The copyright holder has granted the permission for posting the article here.
Homo sapiens, Canis familiaris, and E. coli are scientific names that owe their binomial formulation to Carolus Linnaeus, Sweden's famous eighteenth-century botanist. He was the son of Nils Ingemarsson, a Lutheran parson who during his theological studies adopted the surname Linnaeus from a triple-trunked linden tree he recalled from childhood. Carl had the dubious distinction of having a great-grandmother who was burned as a witch in 1622. But his immortal fame came from organizing the living world on paper and promoting a universally accepted system of scientific names for plants and animals.

By all reports, young Linnaeus was an uneven student who reluctantly learned Latin and neglected most other subjects. Outside of school he was inspired by nature, notably plants, and hoped to pursue botany as a career, although this offered few remunerative positions then. Instead, he trained as a physician, since botany was part of the curriculum. His higher education was gained mainly at the University of Uppsala, Sweden, where in 1730 he attracted the attention of professors with a small essay on sex in plants, "Introduction to the Betrothal of Plants" (Praeludia sponsaliorum plantarum).

The notion that stamens and pistils are involved in plant reproduction was only beginning to be advanced by a few botanists in the late seventeenth century. Linnaeus later used the number and combinations of these sexual elements to classify most flora. He discreetly termed stamens as husbands, pistils as wives, and their interactions as ranging from autogamy to polygamy. The romantic title of his essay did not keep him from condemnation by one prudish critic who wrote, "Such loathsome harlotry as several males to one female would never have been permitted in the vegetable kingdom by the Creator." Nevertheless, the essay brought Linnaeus an appointment as curator of the university's botanical garden.

During the summer of 1732 he traveled around the area of northern Sweden called Lapland—a harsh, sparsely populated region. There he encountered few natives but brought back much information about the flora and fauna. To dramatize his adventure when relating it in lectures, he wore what he erroneously thought was native dress heavily laden with rings and beads along with a cap (a Lapp woman's summer hörnt) and colorful boots that were actually made only for export. From the belt dangled a runic calendar, a pouch of reindeer fur, and a shaman's drum—none of which the ordinary Laplander ever wore. The usual picture of Linnaeus as a young man shows him sporting this bogus costume.

Back in Uppsala, he resumed his medical studies. Due to a disagreement between university professors and Stockholm officials, medical diplomas were not then being granted in Sweden. So in the spring of 1735 Linnaeus sailed to Holland with a 13-page thesis in Latin that he had written on malaria, and within several weeks he obtained the needed doctor's degree at the University of Harderwijk, a popular medical diploma mill. While in Holland he met with naturalists who were so impressed by his knowledge of botany that he was soon recommended to a wealthy merchant-banker to organize his large botanical and zoological garden near Leyden. He remained there three years, developing ideas about classifying the natural world and composing 14 works, including Systema naturae, the first of 12 editions of which were published during his lifetime.
Returning to Sweden in 1738, Linnaeus found that no one seemed aware of his many published works and no university professorship in botany was immediately available. To make a living he began a medical practice in Stockholm, but competition from barbers and various quacks was stiff, so he began frequenting popular restaurants and befriending young soldiers “wounded in castris Veneris” (in the camps of Venus).

His therapy for their gonorrhea, which he had learned in Holland, was so successful that his medical practice attracted politicians and nobility, and soon involved regiments for treating syphilis, scurvy, and smallpox. Through his new patients he gained access to the upper classes, and in a short time was appointed medical officer at the Stockholm naval base, which provided him with a steady salary and the time to further his botanical research and writing.

In 1741 a position at the University of Uppsala became available for Linnaeus as professor of medicine, but he soon exchanged it for professor of botany, a position he coveted more. Over the ensuing decades he enlarged the university botanical garden, gave countless courses and lectures in botany, and attracted hundreds of students. His prodigious writings included numerous texts for his students and successive editions of Systema naturae, wherein he gave rules for naming new genera and species and listed those recognized to date. He coined binomial names for 7,700 species of plants and 4,400 species of animals—about one one-thousandth of the species now believed to exist.

Linnaeus adopted astrological symbols for sex (iron-Mars for males; copper-Venus for females) and promoted his sexual system of classifying plants. Focusing on stamens and pistils amused and titillated students and others as they compared the number, size, and placement of the generative organs of different plants and determined the forms of fertilization in the botanical world: hermaphroditic (most plants), heterosexual (separate plants, e.g., date palms), or flowerless (cryptogams, e.g., fungi, mosses, algae, and ferns). An indirect consequence of such prurient interest was that his sexual system elicited widespread public interest in botany and led to reports of new plants being sent to him from all over the world.

When he died in 1778 after several strokes, Linnaeus was buried in the cathedral at Uppsala. In 1762 he had been ennobled as Carl von Linné. His coat of arms depicted his favorite plant from which Lapp tea was brewed, a member of the honeysuckle family now officially named Linnacea borealis. II

Transylvania’s Special Collections houses a 1797 edition of Species plantarum and an 1801 edition of Systema vegetabilum.