Horticulture-Past to Present Part III: Roman Horticulture*

Philip Kozel Department of Floriculture Cornell University

With the decline of the Greeks, military superiority passed to the Romans, a very practical people who held agriculture in highest esteem. The Roman agricultural writers such as Cato (234 – 149 B.C.), Varrow (116 – 29 B.C.), and Pliny (23-79 A.D.) showed little of the spirit of scientific inquiry which characterized Greek writings. They were, however, excellent agriculturists and tended to adopt and improve upon many of the ideas of the Greeks including the use of legumes to improve poor soil, drainage practices to remove standing water from fields, the use of manure to increase crop yields, and various methods of soil cultivation, realizing their value in weed control. Varrow, in addition, made an important contribution by developing methods for the storage of such fruits as apples and pears. He recommended placement on straw in a cool dry area, generally a cave, and thus gave the Romans a means of having fruit during the winter months. This important step provided a means by which to prevent diseases caused by vitamin deficiences.

The greatest contributions of the Romans in influencing western agriculture was not in unique discoveries or observations but rather in their consolidation of agricultural information which the Greeks and others had developed, and the translation of it into Latin, the universal language at the time and for several centuries thereafter. The importance of this contribution should not be underestimated. Greek, Chinese, Egyptian, and other languages were little known outside of their respective countries, and

^{*}Note: This is Mr. Kozel's third article in his series on the historical aspects of horticulture. His previous articles have treated man's earliest horticultural efforts and Greek horticulture.

Carl F. Gortzig

Horticulture—Past to Present (continued from page 1)

it is impossible to estimate how much knowledge would have been lost if ideas expressed in these languages had not been translated into Latin. Latin continued as the language of scholars until the 15th century.

Pliny, the elder, (Carius Plenius Secundus), 23-79 A.D., was the most widely traveled of the Roman writers and a great collector of information. He visited Africa, Egypt, Greece, Germany, and reached the shores of the North Sea in Belgium. He collected information wherever he found it and wrote a 37-book encylcopedia called *Natural History*. Sixteen of the books concerned plants. Much of the information on plants and their culture was compiled from 2,000 books he collected but which have subsequently been lost. This encyclopedia had a profound influence on students of biology and horticulture from the time of the Roman Empire, through the Middle Ages, and into the late 18th century.

In addition to the Romans, a Greek writer of the period, Dioscorides, wrote an herbal that was to influence botanists and horticulturists for more than 1,500 years. Dioscorides was the most notable botanist after Theophrastus. In his book, he described the pharmaceutical properties, habit of growth, form, roots, stems, leaves, and flowers of 600 plants. His herbal was translated into Latin and included not only descriptions of the plants but also

illustrations of them, which made it the most valuable book on plants written at the time. It should be remembered that the "doctors" of the period used plants or plant parts to treat people afflicted with various illnesses. The doctors used the illustrations in Dioscorides' herbal to assure the collection of the correct plant and plant parts. The influence of this herbal is illustrated by the fact that during the Middle Ages no drug plant was considered authentic unless it could be identified in Dioscorides' herbal

To gain perspective of the times in which these writers lived, one needs to remember that it was during this period that London, England was established as a Roman settlement, that Agricola sailed for the first time around what is now Great Britain, and that an ocean route to India was opened through the Red Sea.