

Rose: Genetics and Breeding

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I. INTRODUCTION

Roses have been grown and admired since the origins of civilization (Wylie 1955a). There is evidence that roses were cultivated 5,000 years ago by the ancient civilizations of China, western Asia and northern Africa (Shepherd 1954). The oldest known representation of a rose was discovered, as part of a fresco, by the archaeologist A. Evans in Knossos, Crete (Testu 1984), which dates from the sixteenth century B.C. (Shepherd 1954) and was identified in 1926 by C. C. Hurst as *R. × richardii* Rehd¹ (Testu 1984). Before they became the most popular garden plant, roses were admired for their petals, and as a source of perfume and edible hips. Moreover, in antiquity, they decorated the tombs of Greece and China, symbolized secrecy in Rome, virtue in the far East, and silence in Egypt (Rowley 1966). Considerable information about roses in antiquity can be found in the writings of the Greek historian Herodotus (490–420 B.C.), the Greek philosopher Theophrastus (372–287 B.C.) and the Roman naturalist Pliny (23–79). Pliny records that the Romans already grew roses in glasshouses that could be heated by hot water in wintertime, in Praeneste, Leporia, and Paestum, and that 32 remedies were based on roses and were derived from flowers, hips, and scent. Maia and Vénard (1976) conclude that the roses that were grown in Europe until the thirteenth century were strictly summer roses, such as *R. moschata*, *R. gallica*, *R. alba*, and *R. damascena* var. *bifera* Hort. non Regel, which has sporadic recurrent flowering and was known in southern Europe since the fourteenth century. There is some evidence that *R. chinensis* was grown in Italy from the beginning of the sixteenth century. This species and *R. × odorata* (Andr.) Sweet, which brought the recurrent flowering character to modern cultivars, were introduced in England at the end of the eighteenth century and beginning of the nine-

¹Authorities for binomial of *Rosa* spp. not indicated in the text may be found in Tables 3.2 and 3.4.