Dioscorides and Pliny

Dioscorides introduces the term *euphorbion* and places it far from the *Tithymalloi*. This separation was to last until the Renaissance. He deals with the former in the third book of his *Materia medica* and with the latter in the fourth. He describes *euphorbion* as a ferulaceous tree from North Africa which produces two types of fluid, one of which is particularly suitable for curing ailments of the eye, among other afflictions; its use, he says, dates back to the reign of Iuba, a monarch contemporary to Caesar Augustus.

Dioscorides introduces various species of Euphorbiae in his fourth book: *ippopheéoΣ* (thorny spurge, *Euphorbia spinosa* L.), *tithymallos* (various species of *Euphorbia*), *pityosa*, *lathyris* (E. *lathyris* L.), *pepolos*, *peplis* and *xamaistyke*. He recognizes seven species under the heading devoted to the *tithymalloi*: *Euphorbia charadas* L., *E. myrsinites* L., *E. paralias* L., *E. helioscopia* L., *E. aleppica* L. (or *E. cyparissias* L.), *E. dendroides* L. and *E. platyphyllos* L. These seven, for which, he gives a morphological description of the main organs and indicates the medicinal uses, were to be repeated over and over again for centuries like a catchphrase.

Pliny deals at length with new details about the origin of *euphorbium* (*E. resinífera* Berg) and he claims derives from the name of Euphorbos, who was physician to King Iuba II of Mauritania. He also establishes seven “genera” of *tithymali*: *charadas* (*E. charadas* L.), *myrrites* (*Euphorbia myrsinites* L., or *E. fontqueriana* W. Greuter), *mecona* or *paralio* (*Euphorbia paralias* L.), *heliosopion* (*Euphorbia helioscopia* L.), *cyparittiam* (*Euphorbia cyparissias* L.), *platyphyllon* (*E. platyphyllos* L.) and *dendroides* (*E. dendroides* L.). To these seven, Pliny adds *pityusa* (*E. pityusa* L.).

Medieval authors

The separation between *euphorbium* and *tithymali* was maintained during Hellenism and the premedieval period (the age of the western fathers of the church). One example is provided by the *Etimologías de San Isidoro de Sevilla* (560-636). Growing imprecision is detected, however, as illustrated by the fact that, when dealing with *tithymali*, the author describes only *E. helioscopia* L. before launching into a fantastic etymology. In referring to *euphorbium* (*E. resinífera* Berg) he stresses the use of this species as an eyewash and its North African origin.

The rediscovery of classical texts in the West came centuries later with the Arab occupation of the Mediterranean. Most had been translated in Baghdad. Among them was Dioscorides’s *Materia medica*, translated during the reign of the Abbasid calif Ja’far al-Mutawakkil (847-861) by Stephanos under the supervision of Hunayn ibn Ishaq. This became the main, though not the only source, of Muslim pharmacopoeia and botany. Thus, for example, we find euphorbias applied in the *Medical Regimen for the pilgrims to Mecca* by Qusta Ibn Luqa al-Balabakki (820-912), who in the fifth chapter, among the effective remedies against earache, includes a little olive mixed with a small amount of euphorbium (*afarbiyun, that is, E. resinífera Berg.*) A further example, one century later, is to be found in another classic which was in widespread use in the medieval world, *Liber servitioris* by Abu ‘l-Qasim Halaf Ibn al-‘Abbas az-Zahrawi (936-1013). An entire chapter of this work is devoted to *tithymali* (*Euphorbia cyparissias* and *Euphorbia helioscopiae*) in recognition of their drastic purgative properties. The author draws a sharp distinction, in accordance Dioscorides’s approach, between *tithymalus* and *euphorbium*. As the centuries go by, the euphorbias remain on the pharmacist’s shelves. This is shown by a later example drawn from Hospital Formulary of Compound Medicaments by Abu l-Fadj Dawud ibn Abi l-Bayan al-Israili (1161-1240) who uses Euphorbium officinalis. And the Arabs were not the only ones to continue using euphorbias. The antidotaries of the Salerno School reproduced Arab medicines using *E. resinífera* Berg. and