

The *Cucumis* of Antiquity: A Case of Mistaken Identity

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It has become nearly axiomatic that “cucumbers” were familiar to ancient Mediterranean civilizations. A number of authors specializing in cucurbits, almost a Who’s Who of Cucurbitology, have written that the cucumber, *Cucumis sativus* L., spread westward from its homeland in the foothills of the Himalayas some 3000 years ago. It is also understood axiomatically that since the English word “cucumber” looks so much like the Latin *cucumis*, that they must be one and the same. Upon closer examination, it can be seen that this “fact” is baseless.

The Latin *cucumis* is indeed the source of the modern English word “cucumber” and translators into English of the works of Columella and Pliny, 1st-century Roman authors who wrote in Latin, used “cucumbers” for *cucumis*. However, Columella and Pliny described the *cucumis* as snake-like and hairy (4). The fruits of cucumber, *Cucumis sativus* L., are glabrous but the young fruits of melon, *C. melo* L., are hairy. A partially preserved fresco at the ruins of Ercolano (Herculanum), a city destroyed along with Pompeii during the eruption of the Vesuvius volcano in 79 CE, shows several striped snake melons, much like ‘Armenian Striped’, inside and next to a large glass jar, indicating that snake melons were not only eaten fresh, but also were pickled.

Hebrew writings by 2nd- and 3rd-century Jewish authors mention the *qishu'im* a number of times and this word has also been translated into English as cucumbers. In these writings, too, the *qishu'im* are described as hairy and, moreover, as having to undergo *piqqus*, removal of the hairs, in order to be fit for eating (7). Again, the hairiness of the young fruits indicates that melons, not cucumbers, are being discussed.

Greek writings allude to *sikyos*, which has also been translated as cucumbers. These writings go back to the *Regimen* of Hippocrates, ca. 400 BCE (5). More telling, though, is the description of the *sikyos* by Theophrastus, ca. 300 BCE (3). Theophrastus was a systematic botanist as he attempted to classify plants by their distinguishing features. He described the *sikyos* as an herbaceous

plant that has a long period of bloom. Its fruit is made of flesh and fiber and the seeds within are arranged in rows. The flowers persist for a long time while the fruits are developing. Thus far, the description could fit very well both *Cucumis sativus* and *C. melo*. But he also stated: *Some flowers are sterile, as in sikyon, those which grow at the ends of the shoot, and that is why men pluck them off, for they hinder the growth of the sikyoi.* By sterile flowers, of course, he would be alluding to the staminate flowers and, according to the description, these are borne on the end of the shoot. Plants of *C. sativus* become increasingly pistillate as they develop (9). In sharp contrast, plants of *C. melo* bear pistillate or hermaphroditic flowers only on the first one or two nodes of branches, all apical nodes are staminate (8). Hence, the description by Theophrastus was of *C. melo*, not *C. sativus*.

Ancient Egyptian wall paintings of elongate fruits have been interpreted as cucumbers, but the striping of some fruits and the furrowing of some others is more consistent with melons (4).

Obviously, the evidence from four Mediterranean civilizations, Egyptian, Greek, Jewish, and Roman, agrees that vegetable melons, mostly chate melons early on (Egypt) and snake melons later on (Greece, Israel, and Rome), were valued and familiar to them.

There is also evidence for the use of snake melons across the Mediterranean and into the Middle East during the medieval period. They are still widely grown today in the warmer regions of the Old World, from northern Africa to India (1,2,6). They do not thrive in cooler climates, however, so when *Cucumis sativus* was finally spread westward from India, it was probably welcomed and the derivatives of the word *cucumis* were expropriated to this species.

The translation of the classical Latin *cucumis* as cucumber may be acceptable to the general public but is problematic when extended to use by students of botany, horticulture, and crop history. It may be quixotic to try to erase the oft-repeated “fact” that the spread westward of cucumbers from the Indian subcontinent to Mediter-

ranean civilizations occurred at least 3000 years ago, but as researchers specializing in cucurbits we cannot escape our responsibility to communicate accurately and attempt to correct a past wrong. There is no evidence for the arrival of cucumbers in Mediterranean lands prior to 1500 years ago. We have found evidence indicating that *C. sativus* arrived in this area early in the medieval period, about the time of the Islamic conquests.

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