

Cucurbits Illustrated in the Late 16th-Century by Joris Hoefnagel (1542–1601)

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The Flemish-born artist Joris Hoefnagel (1542–1601) was a prolific illustrator of insects, animals, and plant parts, including fruits, flowers, and foliage, drawn *ad vivum*. Collections of his drawings are available for viewing on-line at the National Gallery of Art, Washington DC (<https://www.nga.gov/collection/artist-info.2569.html>), the Getty Museum Collection (<https://www.getty.edu/art/collection/person/103K9F>), and the Internet Archive ([Archetypa studiaque patris Georgii Hoefnagelii : Hoefnagel, Joris, 1542-1601 : Free Download, Borrow, and Streaming : Internet Archive](https://www.archive.org/details/Archetypa_studiaque_patris_Georgii_Hoefnagelii_Hoefnagel_Joris_1542-1601_Free_Download_Borrow_and_Streaming_Internet_Archive)). It is noteworthy that this artist spent considerable amounts of time in lands that are today in Belgium, France, England, Spain, Italy, Germany, Austria, and others.

One of his most informative illustrations is the Part 2 Frontispiece of the *Archetypa studiaque patris Georgii Hoefnagelii* (Hoefnagel, 1592). This black-and-white plate contains highly detailed images of various animals and plants. Among them is a mature fruit look-alike of *Cucurbita pepo* subsp. *pepo* Cocomelle Group 'Romanesco' (Paris, 2023). This is but one of many cucurbit images by Hoefnagel. Cucurbits seem to have been one of his favorite subjects. Herein I present, identify to taxon and interpret a few of his more striking cucurbit images.

Cucurbita pepo L. subsp. *pepo*

In the *Animalia volatilia et amphibia (aier)*, a compilation of color illustrations completed by 1580, there are several images of *Cucurbita pepo* subsp. *pepo* (Figure 1). One of them, from Plate 38, shows an elongate, curved, ribbed, greenish-brownish-yellow squash illuminated from its left side and casting a deep shadow at its right side, the same as the adjacent large melon, which is also closer to the viewer. This fruit is approximately 3.5 times longer than its broadest diameter and is swollen at its stylar end, indicating that it is a cocozelle squash (Paris, 1986), and its color suggests that it is fully mature. Although the brightness of the left side of the image makes interpretation difficult, this squash does seem to have five prominent ribs all along its length. This appears to be yet another early image of *Cucurbita pepo* subsp. *pepo* Cocomelle Group 'Romanesco'. The leaf lamina immediately adjacent to the fruit fits 'Romanesco' as well. All told, there are

perhaps as many as three late 16th-century images of the 'Romanesco' cocozelle (Paris, 2023).

Another image, from Plate 12, shows a mature, oval, ribbed pumpkin having broad dark green stripes on a light yellow-orange background (Figure 1). Two more, from Plate 44, show a mature, oblate, strongly ribbed, orangish-green pumpkin, much reminiscent of the guicoys of Guatemala, and a mature, oval-oblong, ribbed, light orange pumpkin.

Cucumis melo L.

Melons were illustrated repeatedly by Hoefnagel. The fruit shown in Figure 1, though appearing to be very large, is disproportionately close to the viewer. Like the squash, it is illuminated from the left, in shadow toward the right. Nearly spherical and 10-lobed, it is pale yellow, and greenish in the depressions. A large slice or split at the top right reveals orange flesh and seed cavity. Brown areas on the rind and flesh suggest the fruit was beginning to rot. The rind is smooth, not netted, and therefore this melon appears to be of the Cantalupensis Group. A similar round, lobed, smooth, orange-fleshed melon, but having greenish-orange external color, is shown in Figure 2, as is another round, lobed, smooth melon, split, yellowish-brown externally with salmon-orange flesh. Both of these also appear to be of the Cantalupensis Group.

Cucumis sativus L.

Cucumbers, too, are a frequently appearing cucurbit in illustrations by Hoefnagel. Most of his illustrations are of pickling cucumbers, which have a length-to-broadest width ratio of 3:1 or less (Figure 3). They have large but sparse warts and spines, quite similar to those that had been illustrated in late-medieval manuscripts of Italian provenance but not those of northern French provenance, which had very many small warts and spines (Paris et al., 2011). Hoefnagel illustrated cucumbers in realistic detail and did not shy from illustrating distorted "cull" fruits.

Lagenaria siceraria (Molina) Standl.

Bottle gourds, too, were frequently drawn by Hoefnagel (Figure 4). Most of them are very long; these are edible when young but desiccate as they mature and most of those

illustrated are well beyond their prime for kitchen use. Large bell-shaped bottle gourds, which are utilitarian when mature and dry, appear less frequently. In Plate 64 of the *Animalia volatilia et amphibia (aier)*, foliage and a flower of *Cucurbita pepo* are shown attached to the green, bell-shaped gourd.

***Citrullus lanatus* (Thunb.) Matsum. & Nakai**

***Citrullus amarus* Schrad.**

***Cucurbita maxima* Duchesne**

***Cucurbita moschata* Duchesne**

***Cucurbita. pepo* subsp. *ovifera* (L.) D.S. Decker**

These five taxa are absent from the illustrations of Hoefnagel. They have long-keeping fruits, more so certainly than those of *Cucumis*. As both dessert watermelons and citron watermelons had been present in Europe since Roman times (Paris, 2015), it is surprising that Hoefnagel either did not encounter them or did not select any for illustration. *Cucurbita pepo* and *Cucumis sativus* would certainly be better adapted climactically, in most of the lands that Hoefnagel resided in, than *Citrullus* species (Wehner et al., 2020). Yet melons, which are quite cool-temperature sensitive too, appear frequently in his illustrations. As for *Cucurbita maxima* and *Cucurbita moschata*, there are few illustrations and descriptions of these taxa in Europe that antedate the works of Hoefnagel (Formiga and Myers, 2020), so it is possible that he simply did not encounter them. European illustrations of *Cucurbita pepo* subsp. *ovifera* antedate and were contemporary to the works of Hoefnagel, as were illustrations of the grooved pumpkins of eastern North America (Paris, 2000; Teppner, 2000), so it seems odd that these are absent.

Conclusions

Among the four cucurbit species that Hoefnagel illustrated, quite a bit of variation is evident in three of them. Of the *Cucurbita pepo*, all were distinctly ribbed and from the same subspecies, but there were two distinct shape profiles, most of the fruits being nearly round (oblate to oval-oblong) but two were about three-and-a-half times long as they were wide and swollen at the stylar end (Figure 1; Paris, 2023). Hence, both pumpkins and cocozelles were illustrated. The pumpkins

differed in rind color and, regardless of shape, all of the fruits were shown at full maturity. Likewise, the *Lagenaria siceraria* fruits were of two distinct shapes, most very long but two were bell-shaped (Figure 4). They were depicted at various stages of maturity, many of them too mature to be of culinary use. Though most of the cucumbers illustrated were of the short, pickling type (Figure 3), others were of intermediate length or very long (not presented). Again, some appeared to be mature, well past their prime for culinary use. Only the melons had little variation, and were fairly large, round, and lobed, differing only in rind color (Figure 2).

Literature Cited

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Figure 1. Images of *Cucurbita pepo* subsp. *pepo* in the *Animalia volatilia et amphibia (aier)*, ca. 1575/1580 (National Gallery of Art). Top left: Plate 38, mature ribbed cocozelle squash (adjacent and behind one large melon and to the side of a stunted one). Top right: Plate 12, mature, ribbed, striped pumpkin (adjacent to pears). Bottom: Plate 44, mature ribbed, oblate Guatemalan pumpkin or “guicoy” (left) and mature, ribbed, oval pumpkin (right).



Figure 2. Images of *Cucumis melo*. Left: *Animalia quadrupedia et reptilia (terra)* Plate 29, ca. 1575/1580 (National Gallery of Art). Right: *Mira calligraphiae monumenta*, Ms. 20 (86.MV.527) folio 144v, 1591–1596 (Getty Museum Collection).



Figure 3. Images of *Cucumis sativus*. Top left: two pickling cucumbers, *Archetypa studiaque patris Georgii Hoefnagelii*, Part 2 Frontispiece, 1592 (National Gallery of Art). Top center: cull pickling cucumber and part of adjacent foliage including peduncle, stem, tendrils, and leaf, *Archetypa* Part 1 Plate 11 (National Gallery of Art). Top right: one mature distorted (adnated) pickling cucumber, *Mira calligraphiae monumenta*, Ms. 20 (86.MV.527) folio 38, 1591-1596 (Getty Museum Collection). Bottom: pickling cucumbers, one large and one very young with attached corolla, and with adjacent foliage of stem, tendrils, and leaves, *Archetypa* Part 2 Plate 11 (National Gallery of Art).



Figure 4. Images of *Lagenaria siceraria*. Left to right: One long and one bell-shaped gourd, *Archetypa studiaque patris Georgii Hoefnagelii*, Part 4 Frontispiece, 1592 (National Gallery of Art); mature pale-colored long and immature green bell-shaped gourds, and oval-oblong, ribbed, mature orange-yellow pumpkin of *Cucurbita pepo*, with foliage and flower of *C. pepo* attached to the bell gourd, *Animalia volatilia et amphibia (aier)* Plate 64, ca. 1575/1580 (National Gallery of Art); long, immature, pale-green gourd, *Animalia quadrupedia et reptilia (terra)* Plate 29, ca. 1575/1580 (National Gallery of Art); two long, light green and yellow-green immature gourds, *Mira calligraphiae monumenta* Ms. 20 (86.MV.527) folio 144v, 1591–1596 (Getty Museum Collection); yellow-green immature gourd, *Mira calligraphiae monumenta* Ms. 20 (86.MV.527) folio 132v (Getty Museum Collection).