

# The History of the Arrival of the Tomato in Europe: An Initial Overview

### Maríaluz López-Terrada. INGENIO (CSIC-UPV)

This study analyses the process by which the first tomatoes arrived in Europe, became known to plant scholars and were culturally assimilated, to the point of becoming a regular feature of European kitchens and dining tables, as a crop and as a product.

### 1. INTRODUCTION

Food plants have a fundamental place in human life. The introduction of the "new world" of American plants into Europe was therefore a process that gave rise to profound social and cultural changes. The encounter between Europe and America was perhaps the most important act of globalisation in history: two different cultural and natural worlds came into contact, and the results of that contact had a huge impact on the landscape, as well as on everyday experience and intellectual life. The arrival of American plants changed cooking and eating habits, medicinal products, drugs, poisons, gardens, but also wood types, pigments, solvents and many other materials with practical applications. This complex process of dissemination and assimilation is the historical context in which we must address the process by which the first tomatoes arrived in Europe, became known to plant scholars and were culturally assimilated, to the point of becoming a regular feature of European kitchens and dining tables. The introduction of the tomato into Europe therefore has two quite distinct histories. First, there is the history of the actual dissemination of the seeds, followed by that of their cultivation and consumption by Europeans. The other history, which is very different though directly related to the first, is that of the knowledge and study of a new plant in the academic world. The most standard and traditional histories of the tomato written up till now, and those on the introduction of American plants in general, mix the two together. This initial overview of the subject will therefore approach the history of the arrival and cultural assimilation of the tomato in Europe from two separate perspectives. The first is how the tomato entered the catalogue of plants studied by European naturalists of the sixteenth and early seventeenth centuries. The second part is devoted to trying to determine, from a range of sources, when the tomato began to be grown and consumed; in other words, the gradual integration of an alien plant into European food systems in the Early Modern period.

As with many other aspects of the history of plants, the main problem that has to be tackled is that of sources, all the more so when what is being studied is a food product. Eating is a primary and unavoidable necessity, but also a cultural act, and for this reason the history that has developed between these two poles is a difficult and complex one, strongly



conditioned by power relationships and social conditions: "a history of famine and plenty in which cultural images also play a decisive role".<sup>1</sup> Thus the history of food and food plants unfolds in harmony with other histories, determining them and in turn being determined by them, and therefore the historical study of food is, above all, a multidisciplinary analysis that requires taking account of every possible aspect: economics, demographics, technology, social structure, but also the scientific ideas current at each moment in history and, in the specific case of the tomato, a thorough analysis of natural history.<sup>2</sup>

This study of the history of the tomato, of which an initial overview is presented here, is not conceived as an analysis of the gradual advance of scientific knowledge towards a "real and true" understanding of current scientific thinking on this plant;<sup>3</sup> instead, it will analyze the knowledge and practices to which a vast quantity of new plant products derived from colonial expansion gave rise, in the historical context of European society.<sup>4</sup> Beyond what annalistic historians did when they basically concentrated on more demographic and nutritional issues, a "total" view of food, according to the most recent trends inspired by anthropology, must take an interdisciplinary approach to the subject. This project is therefore more than a mere history of the tomato, since it has been directly linked from the beginning to ideas and habits concerning food, as well as to other food products, but also to the profound change that took place in the sixteenth century in the ways in which the academic community studied plants. As David Gentilcore has remarked, "for all these reasons, the tomato is an ideal basis for examining the prevailing values, beliefs, conditions, and structures in the society of which it was a part and how they change over several centuries".<sup>5</sup> So it is obvious that the history of botany and agriculture, for example, are not just two more topics among many others; they are very important issues for tracing the history of how the tomato was introduced into Europe. However, they are not the only ones.

Starting from these principles, work has begun on systematically sifting through all the sources that could provide information on the introduction of the tomato into Europe. A previous study on this process was carried out on the basis of herbals and other academic printed texts devoted to the study of plants, as well as the printed Chronicles of the Indies of

<sup>&</sup>lt;sup>1</sup> MONTANARI, Massimo. *The Culture of Food*. Oxford: Blackwell, 1994, p. xi. (First published as *La fame e l'abbondanza. Storia dell'alimentazione in Europa*. Roma & Bari: Laterza, 1993.)

<sup>&</sup>lt;sup>2</sup> A good illustration of the many ways of doing food history is provided by three recent publications: KIPLE, Kenneth F. & ORNELAS, Kriemhild Coneè (eds.). *The Cambridge World History of Food*. Cambridge: Cambridge University Press, 2000; FLANDRIN, Jean Louis & MONTANARI, Massimo (dirs.). *Food: A Culinary History from Antiquity to the Present*. New York: Columbia University Press, 1999; and PILCHER, Jeffrey M. (ed.). *The Oxford Handbook of Food History*, Oxford: Oxford University Press, 2012.

<sup>&</sup>lt;sup>3</sup> See particularly the studies inserted at the beginning of works of a botanical nature, which tend to repeat the same data on the expansion of tomato growing without any kind of historical contextualisation. However, there are some exceptions, such as the monograph on the taxonomy of the tomato by PERALTA, Iris E., SPOONER, David M. & KNAPP, Sandra. *Taxonomy of Wild Tomatoes and Their Relatives (Solanum sect. Lycopersicoides, sect. Juglandifolia, sect. Lycopersicon; Solanaceae*). Systematic Botany Monographs, 84. Ann Arbor, MI: American Society of Plant Taxonomists, 2008.

<sup>&</sup>lt;sup>4</sup> PILCHER, Jeffrey M. "Cultural Histories of Food". In: *The Oxford Handbook of Food History*, Oxford: Oxford University Press, 2012, pp. 41–60.

<sup>&</sup>lt;sup>5</sup> GENTILCORE, David. Pomodoro! A History of the Tomato in Italy. New York, Columbia University Press, 2010, p. xi.



the period.<sup>6</sup> However, new studies and historical approaches to the so-called *Columbian Exchange*, and also the new analyses and perspectives on the study of botany in Renaissance Europe, as well as the recent introduction of digital access to manuscript sources and to certain rare printed items, have made a New Spain new revision essential. Similarly, given the aims of this study, it was vital to include the chronicles that remained unpublished, as well as the material from the first great scientific expedition, that of Hernández. To summarise very schematically, the following types of sources, all from the sixteenth and seventeenth centuries, have been systematically sifted through:

- Academic texts on the study of plants: European herbals and collections of prints and drawings.
- Scientific texts from other scientific disciplines, mainly geographical, but also medical, especially *regimina sanitatis*.
- Texts on agronomy and gardening, of both an academic and a popularising nature.
- Books of secrets, both printed and manuscript.
- Cookery books, both printed and manuscript.
- The so-called Chronicles of the Indies.
- Lexicons, mainly Spanish-language.
- Herbals preserved in botanical gardens.
- Iconographic sources: painting.

In addition, work has started, but has not yet been completed, on what is perhaps the most difficult part of the project: locating and analysing the sources that will enable us to reconstruct how tomatoes were really grown and consumed. On the one hand, there are allusions that appear in literary sources, which are crucial for studying the spread of the tomato in the Spanish Monarchy (given the scarcity of references in the other types of sources analysed). These sources enable us to obtain a fuller picture not only of real patterns of consumption but also of knowledge of this plant among the general population, through uses of the term *tomato* as a metaphor and an analogy.<sup>7</sup> On the other, archival sources, particularly those of a financial nature, will enable us to gauge both cultivation and real modes of consumption more accurately. The first samplings of archive documents, for obvious reasons, have been limited to the former Kingdom of Valencia, since although tools, such as PARES,<sup>8</sup> do exist, they have not yet attained a sufficient level of description to allow a systematic search to be made without a research team to back it up.

The following sections will describe the theoretical framework within which the various aspects of the history of the tomato are to be addressed.

<sup>&</sup>lt;sup>6</sup> PARDO TOMÁS, JOSÉ & LÓPEZ-TERRADA, María Luz, *Las primeras noticias sobre plantas americanas en las relaciones de viajes y crónicas de Indias, 1493–1553.* Valencia: Instituto de Estudios Documentales e Históricos sobre la Ciencia, 1993, and LÓPEZ PIÑERO, JOSÉ María & LÓPEZ-TERRADA, María Luz, *La influencia española en la introducción en Europa de las plantas americanas: 1493-1623.* Valencia: Instituto de Estudios Documentales e Históricos sobre la Ciencia, 1993.

<sup>&</sup>lt;sup>7</sup> SLATER, John. *Todos son hojas: literatura e historia natural en el barroco español*. Madrid: CSIC, 2010.

<sup>&</sup>lt;sup>8</sup> http://pares.mcu.es/



#### 2. THE FIRST REPORTS: THE SPANISH ARRIVE IN MESOAMERICA

Leaving aside the origin of the plant, Europeans first came into contact with the domesticated tomato in Mesoamerica after the capture in 1521, by Hernán Cortés, of the city of Tenochtitlan, where it was an integral part of the Nahua diet and culture in the sixteenth century. As Bernardino de Sahagún tells us, there were sellers of different varieties of tomatoes in the markets:

Those who deal in tomatoes usually sell the large ones and also the very small ones, and all the kinds that exist, of many different varieties, as discussed in the text, such as yellow tomatoes, red ones and those that are very ripe. Dishonest traders in this fruit sell rotten and squashed ones, and those that are still sour. They also sell those that are not yet fully ripe but still green, and these, when eaten, upset the stomach, and provide no flavour at all, but rather cause rheums.<sup>9</sup>

There are many other well-known references to the tomato in the Chronicles of the Indies, including those of Bernal Díaz del Castillo,<sup>10</sup> Cervantes de Salazar<sup>11</sup> and Acosta,<sup>12</sup> which describe the ways in which tomatoes were consumed by native Americans, but also reveal their assimilation into the cuisine of the Spaniards living in what was by now called New Spain. In 1571, for example, the Franciscan friar and priest Alonso de Molina, in the second edition of his Nahuatl-Spanish dictionary *Vocabulario en lengua mexicana y castellana* ("Vocabulary of the Mexican and Castilian Languages"), translated the Nahuatl term *tomatl* as "a certain fruit used to add a sour flavour to stews and sauces",<sup>13</sup> and indicated that *xaltomatl* was "a certain fruit like tomatoes", whilst *xitomatl* was translated as "large red, yellow and white tomatoes".<sup>14</sup> In the Spanish-Nahuatl section, the "fruit added to stews instead of sour grapes"<sup>15</sup> was *tomatl*, *xaltomatl* or *xitomatl*. In other words, Spaniards had already adopted the plant that the Nahuas termed *xitomalt*, and that groups further south called *tomati*, to add acidity to sauces and stews cooked in the New World, and they appropriated the latter name, as there was no fruit like it in Europe. By contrast, since

<sup>&</sup>lt;sup>9</sup> "El que trata en tomates suele vender los que son gruesos y también los menudillos, y todos los que son de muchos y diversos géneros, según se trata en el texto, como son los tomates amarillos, colorados y los que están bien maduros. El que es mal tratante en esto vende los que están pudridos y machucados, y los que están aún azedos. Vende también los que aún no están bien maduros sino muy verdes, y cuando se comen rebuelven el estómago, ni dan sabor alguno, sino que provocan las reumas." SAHAGÚN, BERNARDINO DE. *Historia general de las cosas de Nueva España por el fray Bernardino de Sahagún: el Códice Florentino. Libro X: del pueblo, sus virtudes y vicios, y otras naciones*. Mss. Biblioteca Medicea Laurenziana, Florence. <u>http://www.wdl.org/es/item/10621/#collection=florentine-codex</u>, fol. 49r.

<sup>&</sup>lt;sup>10</sup> DÍAZ DEL CASTILLO, BERNAL. *La historia verdadera de la conquista de la Nueva España* (1632). Ed. C. Sáenz de Santa María. Madrid: Instituto González de Oviedo, 1982, ch. LXXXIII, p. 159; BECKJORD, Sarah H. "'Con sal y ají y tomates': las redes textuales de Bernal Díaz en el caso de Cholula". *Revista Iberoamericana*, 61, Nos. 170–171, January–June (1995): 147–60. http://revista-iberoamericana.pitt.edu/ojs/index.php/Iberoamericana/article/download/6400/6576

<sup>&</sup>lt;sup>11</sup> CERVANTES DE SALAZAR, F. *Crónica de la Nueva España* (1544); ed. Manuel Magallón. Madrid: Atlas, 1971, ch. 108.

<sup>&</sup>lt;sup>12</sup> ACOSTA, JOSÉ DE. Historia natural y moral de las Indias, en que se tratan las cosas notables del cielo, y elementos, metales, plantas, y animales dellas: y los ritos, y ceremonias, leyes, y govierno, y guerras de los indios. Sevilla, en casa de Juan de León, 1590. Book IV, ch. XX, p. 114.

<sup>&</sup>lt;sup>13</sup> "Cierta fruta que sirve de agraz en los guisados y salsas". MOLINA, ALONSO DE. *Vocabulario en lengua mexicana y castellana*. México, en casa de Antonio de Spinosa, 1571, fol. 149r.

<sup>&</sup>lt;sup>14</sup> "Cierta fruta como tomates", Vocabulario, fol. 158v; "tomates grandes colorados, amarillos y blancos", fol. 159v.

<sup>&</sup>lt;sup>15</sup> "Fruta que echan en los guisados en lugar de agraz", *Vocabulario en lengua castellana y mexicana*, fol. 64r.



American pumpkin and beans were similar to species grown in Europe, they were called by the Spanish term. Thus it is the Mesoamerican name that survives in almost all languages, despite the French and Italians who from the outset called it "apple of love" (*pomme d'amour*) or "golden apple" (*pomodoro*).

The information on the tomato in the work of Francisco Hernández, who, as is well known, conducted the first scientific expedition to the New World, is of a completely different character. As José Pardo has observed, the most original features of Francisco Hernández himself and his work are: "first, that he received a solid scientific and medical training; second, that he led what has been considered the first scientific expedition to the New World, lasting six years (seven if we count the two long crossings), between 1570 and 1577; third, his particular sensitivity to the culture and language of its inhabitants, the systematic collecting of information by native healers and experts, and also his work with indigenous draughtsmen and painters; fourth, together with the foregoing, and in full and fruitful contradiction, his ambition to compile the most exhaustive possible collection of knowledge on the plants and animals of a new territory and integrate it into the intellectual framework of the Western European scientific tradition."<sup>16</sup> López Piñero and Pardo Tomás have pointed out in their studies of his work that "Hernández's output basically conformed to natural history in the sense in which this term was still used in the sixteenth century, that is, a descriptive knowledge of nature. Without moving beyond this conception, he belonged to the group of Renaissance naturalists who began to introduce some analytical elements into their works. In this case, they came mainly from the new morphological approaches which led them on isolated occasions, like other authors of the same tendency, to incipient attempts at experimentation".<sup>17</sup> His work was therefore written from the broad perspective of a naturalist, and not as a narrative and description, like the Chronicles of the Indies, or an applied contribution to materia medica, as in other cases to be discussed later. As for the descriptions of the tomato, in this initial overview I shall confine myself to saying, on the basis of the work of these authors, that Hernández establishes four groupings within the Solanaceae family. The first of these is the series of nine chapters beginning with the review chapter entitled "tomatl seu planta acinosa" (tomato or grape-like plant). Here, having identified them as "especies de solano" (species of nightshade) specific to the New World, he presents a collection of descriptions distinguishing nearly twenty species of *Lycopersicum*, Nicandra, Physalis, Saracha and Solanum. In the initial chapter of his series on the subject,

<sup>&</sup>lt;sup>16</sup> PARDO TOMÁS, José. "Francisco Hernández (1515?–1587): Medicina e historia natural en el Nuevo Mundo". In: Los orígenes de la ciencia moderna. Seminario Orotava. Actas XI y XII. La Orotava: Fundación Canaria Orotava de Historia de la Ciencia, 2002, pp. 215–44 (p. 216). Hernández's work has been, and continues to be, the object of numerous studies. See LóPEZ PIÑERO, José María & PARDO TOMÁS, José. La influencia de Francisco Hernández (1515–1587) en la constitución de la botánica y la materia médica modernas. Valencia: IEDHC, 1996; PARDO TOMÁS, José. El tesoro natural de América. Colonialismo y ciencia en el siglo XVI. Madrid: Nivola, 2002; SOMOLINOS D'ARDOIS, Germán. "Vída y obra de Francisco Hernández". In: HERNÁNDEZ, Francisco, Obras completas, vol. I. México: Universidad Nacional Autónoma de México, 1960, pp. 95–440; VAREY, Simon, CHABRÁN, Rafael & WEINER, Dora B. (eds.). Searching for the Secrets of Nature: The Life and Works of Dr. Francisco Hernández. Stanford, CA: Stanford University Press, 2000.

<sup>&</sup>lt;sup>17</sup> LÓPEZ PIÑERO, JOSÉ María & PARDO TOMÁS, JOSÉ. La influencia de Francisco Hernández, p. 56ff.



he refers to the "xitomame seu tomame magna" (*xitomame or large tomame*) and to several "tomames" corresponding to different species of this genus. He then recalls that Europeans "who have become acquainted with some of these fruits have called them fruits of love", and provides information on their uses, one of which is "to grind them and mix them with chilli to make a very pleasant sauce which enhances the flavour of almost all dishes and foods".<sup>18</sup> In the following chapters he supplements his review with studies of other kinds of "tomatl" belonging to other genera; the second and third chapters, for example, are devoted to "coztomatl altera" and "coyotomatl" respectively.<sup>19</sup>

Thus the first tomatoes arrived in the Iberian Peninsula from Mexico in the first half of the sixteenth century, because, as all the sources seem to indicate, only a few years after Cortés arrived in Mexico the tomato was being cultivated in Europe: they grew in the gardens of European elites (both scientific and political), they were depicted in botanical watercolours and lithographic prints in books, painted in still lifes and mentioned in creative and scientific literature. One must bear in mind that Seville was the port of arrival for all ships coming from America. While many seeds were transported deliberately, perhaps by Spaniards who were returning and had grown accustomed to the flavours and smells of criollo cooking, others doubtless arrived accidentally. In the case of the tomato, given that, as we have seen, it was a product of the Nahua food system that was integrated quite quickly into the cuisine of the conquerors, it is more likely to have been transported voluntarily. It was the Spanish colonial system that helped the tomato to spread all over the world: first to the Caribbean, then to Europe, later reaching the Philippines and eventually Asia. In any case, although when ships arrived in Seville all the merchandise they were carrying was recorded at the Casa de Contratación for the requisite payment of duties and taxes, and meticulous inventories survive,<sup>20</sup> this was not the case with plants, and therefore although all the indications are that tomatoes entered Europe through Seville, there is no documentary evidence on this point.<sup>21</sup>

To conclude, the tomato was often an undocumented traveller in sixteenth-century Europe, but despite its lack of cultural identity and status as a food it ultimately became an essential product in the modern diet, though one with a complex history full of obscurities.

<sup>&</sup>lt;sup>18</sup> "Los [...] europeos que han conocido algunos de estos frutos, los han llamado frutos de amor. [...] Se hace de ellos, molidos y mezclados con *chilli*, una salsa muy agradable que mejora el sabor de casi todas las viandas y alimentos."

<sup>&</sup>lt;sup>19</sup> López PIÑERO, José María & PARDO TOMÁS, José. *La influencia de Francisco Hernández*, pp. 74–76.

<sup>&</sup>lt;sup>20</sup> All the documentation on travel and trade with America is now in the Archivo de Indias. http://www.mecd.gob.es/cultura-mecd/areas-cultura/archivos/mc/archivos/agi/portada.html

<sup>&</sup>lt;sup>21</sup> As Janet Long points out, "Spain was the first stop for the jitomate on its migration through Europe. There is no record of its arrival at the port of Seville; in fact, the transfer of plants was rarely considered important enough to merit recording". LONG, Janet. "De tomates y jitomates en el siglo XVI". *Estudios de Cultura Náhuatl*, 25 (1995): 239–52, p. 246.



# 3. THE TOMATO ARRIVES IN EUROPE: DISSEMINATION OF KNOWLEDGE OF THE PLANT IN THE EUROPEAN ACADEMIC WORLD

Texts of botanical content published in the sixteenth century with references to the tomato are part of the process of the formation and birth of botany. This was a time of unprecedented growth in studies on plants, both native European species and those arriving as a result of the exploration of America and Asia. The great expansion of natural history in both quantitative and qualitative terms can be largely explained by the mere fact that colonial expansion had given European naturalists access to a territory of vast proportions, a "New World" full of objects completely unknown to them.

Many European authors, all of them with medical training, reevaluated the classical sources of knowledge, a practice known as Renaissance humanism. It is important to bear in mind that when the first tomatoes and tomato seeds arrived in Europe botany was not a scientific discipline. The study of plants was not professionalised; it was undertaken by doctors and apothecaries, together with lay and ecclesiastical persons from a range of occupations. The behavioural patterns of scientific activity in relation to botany were not clearly defined until the nineteenth century. The discovery and collection of botanical material, the publication of descriptions and images and, most of all, the introduction of plants into materia medica, food and gardens were dissociated from each other in Early Modern times. In the sixteenth and seventeenth centuries the study of plants belonged to the field of natural history, from a theoretical point of view, but in practice it depended to a greater or lesser degree on their medical applications. Institutionally the only university chairs that existed in Europe were those in "simple medicines" or materia medica. In medicine this reevaluation was marked by a systematic review of Hippocratic texts and those of Galen. In addition, the return to classical sources involved the publication and direct translation of the medical literature of Antiquity, with the consequent commentaries based on these texts. So various authors undertook translations of and commentaries on the works on materia medica and description of the plant world by Dioscorides, Galen, Pliny and Theophrastus — all of them based on Mediterranean flora — trying to reconcile the new empirical discoveries (that is, plants growing in Central and Northern Europe) with the old systems of thought, at the very moment when an enormous quantity of new plant species were arriving in Europe. In other words, European scholars of botany had to adapt the new plants to the rules of the preexisting system of ordering, classification and understanding of the plant world, by trying to locate them in the texts of classical authorities. Thus most authors of herbals regarded the plants from the new territories as variants of those described in the classical texts and sought similarities and analogies.

In commentaries on classical *materia medica* texts, especially in the many editions of Dioscorides, the plants from the New World were described in the comments on those to



which they bore the greatest similarity. Perhaps, as Gentilcore notes,<sup>22</sup> this is one of the reasons why only a few were described in printed herbals and botanical texts, and why there is no real correspondence between the plants that were consumed and were part of the diet and those that appear in academic texts. This may be true of the tomato, but it is also true of potatoes and sweet potatoes; however, it is not the case with maize, beans and many species of *Capsicum*, because none of these was regarded as exotic; on the contrary, there were promptly assimilated (and grown and consumed), just as cereals, European beans and pepper had been previously. Suffice it to say that each of these plants has its own complex history.

The process by which the tomato found a place in pre-existing plant classifications was somewhat different. Descriptions and pictures of the tomato have been found in practically all the published and manuscript herbals of the second half of the sixteenth century and the first half of the seventeenth, which means that in order for a study to be more than a mere list of references, those references need to be analysed in depth. This task is currently being carried out, with the object of situating occurrences of the tomato in the context of the "new" natural history, together with the processes of assimilation, exchange and dissemination of botanical knowledge in the Renaissance. Although numerous references to the tomato have been found in natural history texts, I shall confine myself here to giving a few examples. The first is the text that all studies regard as the first mention of the tomato in Europe: that of the Italian scholar Pietro Andrea Mattioli, in 1544. Specifically, after describing aubergines, he says: "Another species has been brought to Italy in our time, flattened like red apples and composed of segments, green at first and of a golden colour when ripe, and they are also eaten in the same way (as aubergines)",<sup>23</sup> adding that they were consumed cooked and seasoned with salt, oil and black pepper. In the Latin edition of his commentary on Dioscorides published ten years later, in 1554, Mattioli added that aubergines of this kind were known as *pomi d'oro* (golden fruit).<sup>24</sup> This name is more than merely descriptive; it alludes to the garden of the Hesperides, where, according to Greek mythology, the nymphs lived and there were trees that produced golden fruit. Thus by associating it with a plant of similar characteristics, the aubergine, and by using the term pomi d'oro (and similar names in other languages), the necessary continuity was established with Classical Antiquity.<sup>25</sup>

<sup>&</sup>lt;sup>22</sup> GENTILCORE, David. *Pomodoro! A History of the Tomato in Italy*, p. 7.

 <sup>&</sup>lt;sup>23</sup> "Portansi ai tempi nostri d'un'altra spetie in Italia schiacciate come le mela rose e fatte a spicchi, di colore prima verde e come sono mature di color d'oro le quali pur si mangiano nel medesimo modo (delle melanzane)."
<sup>24</sup> MATTIOLI, Pietro Andrea, *Di Pedacio Dioscoride libri cinque. Della historia et materia medicinale tradotti di lengua*

<sup>&</sup>lt;sup>24</sup> MATTIOL, Pietro Andrea, Di Pedacio Dioscoride libri cinque. Della historia et materia medicinale tradotti di lengua volgare... Venezia, 1544; Commentarii, in libros sex Pedacii Dioscorides Anarzabei, de materia medica. Venezia, 1554, p. 479.

<sup>&</sup>lt;sup>25</sup> GENTILCORE, David. *Pomodoro! A History of the Tomato in Italy*, p. 4.



In the same years in which Mattioli published his book, another Italian, Ulisse Aldrovandi (1522–1605), one of the most eminent naturalists in Europe, partly by virtue of having managed to establish a network of correspondents extending to practically every country and to organise one of the most important natural history collections, including herbaria, drawings, objects, paintings and specimens of flora and fauna from Europe, Asia, Africa and also America, had an example of the tomato in his herbarium.<sup>26</sup> According to Andrea Ubrizsy Savoia, it seems to have reached him via Luca Ghini, who, in turn, had obtained seeds or plants from the Venetian botanist P. A. Michiel: "The species is found under this name in the herbarium of Gherardo Cibo dating from 1539–52 as well as the so-called Erbario Estense (Herbarium of Ferrara) of 1570–80." The plant was present in the botanical garden in Pisa during the period when Luca Ghini was there (1544–1554), and it is therefore possible that Aldrovandi's specimen came from the Pisan garden.<sup>27</sup> Moreover, there are numerous references to the tomato in his correspondence, for example in a letter dated 10 March 1572 from Constanzo Felici:

A certain seed has come into my hands, which is enclosed here. I bring it to your attention so that you may ascertain what it is. It was sent to me from Pesaro by M. Baldo Cortivio, a very honourable and learned gentleman with a great interest in these matters of simples. It is a plant with stems and leaves similar to the aubergine, with fruit like the *pomo d'oro*; I mean the red one, not the yellow, which is different. Please give it your consideration and then tell me your opinion.<sup>28</sup>

In other words, following the same line as Mattioli, and like practically all the European naturalists of the period, it was recognised as part of the genus *Solanum*, along with plants like the aubergine, belladona, and also the newly-discovered potato.

Very similar is the text on the tomato by a late-sixteenth-century English writer, John Gerard, a surgeon and herbalist who in 1597 published an English adaptation of the herbal of the Dutch naturalist Rembert Dodoens, under the title *The Herball, or Generall Historie of Plantes*. Despite the great differences both in Gerard's academic training and in the type of text, the tomato is again mentioned together with the aubergine, and reference is made to its consumption in the Mediterranean:

Poma Amoris. Apples of Love. [...]

In Spaine and those hot Regions they use to eate the apples prepared and boiled with pepper, salt, and oile: but they yeelde very little nourishment to the bodie, and the same nought and corrupt.

<sup>&</sup>lt;sup>26</sup> Orto Botanico. Università di Bologna, Erbario Aldrovandi, vol. 1, fol. 368.

<sup>&</sup>lt;sup>27</sup> UBRIZSY SAVOIA, A. "Le piante americane nell'Erbario di Ulisse Aldrovandi". *Webbia*, 48 (1993): 579–98, pp. 580–81.

<sup>&</sup>lt;sup>28</sup> "Mi è venuto certo seme per le mani, quale è qui incluso, che ve ne faccio parte acciò che nascendo sappiate dire che cosa sia. Me l'ha mandato da Pesaro M. Baldo Cortivio, gentilhuomo molto honorato e litterato e molto curioso di queste cose de' semplici. Gli è pianta che è con li rami e foglie simile al melanciano (melanzana) con il frutto simile al pomo d'oro, dico quello rosso e non il giallo, distinto in fette. il considererete, me ne direte poi la vostra opinione." Bologna, Bibl. univers., ms. 688: *Del'insalata e piante che in qualunque modo vengono per cibo del'homo* (cc. 42 n.n.). Lettera o discorso di Costanzo Felici medico di Rimini ad U. Aldrovandi sopra le insalate e le piante che servono per cibo dell'uomo.



Likewise they do eate the apples with oile, vineger and pepper mixed togither for sauce to their meate, even as we in these cold countries do mustarde.<sup>29</sup>

In contrast to these frequent and very similar references to the tomato, and the fact that the plant certainly entered Europe through the Peninsula, I have not found references to it in sixteenth-century Spanish treatises on natural history. Andrés Laguna, for example, the commentator on Dioscorides in Spanish, contemporary with Mattioli, whose text went through over twenty editions, does not mention it, but neither do later writers such as Jerónimo de Huertas, author of a Natural History published between 1624 and 1629. It is cited by subsequent authors, including Juan Eusebio Nieremberg in his *Historia naturae, maxime peregrinae libris XVI distincta<sup>30</sup>* or Bernardino de Cienfuegos in his manuscript *Historia Natural.*<sup>31</sup> This absence of the tomato in academic natural history texts contrasts with its constant presence in writings produced in and arriving from America. Determining the reasons for this apparent contradition will be another of the future aims of the study.

# 4. THE TOMATO IN THE FIELD AND THE KITCHEN: ITS POSITION IN THE EUROPEAN FOOD SYSTEM IN THE SIXTEENTH CENTURY

Tomatoes were not a easy product to introduce into the European diet: they did not look or taste like any known plant, they had a strange consistency and texture, they were very acidic when green, and once ripe they were soft, and disintegrated in the lengthy cooking characteristic of Renaissance cuisine. However, as Janet Long has pointed out, the Mediterranean climate and soil were ideal for growing tomatoes, and they did not compete with local crops, as had happened with maize, which, because it was so versatile and adaptable, had displaced the growing of traditional cereals in some regions of Europe. The tomato was a supplementary crop which did not interfere with traditional ones.

In order to assess the introduction of the tomato into the European diet properly we must take into account what was culturally considered good and bad to eat. At the time when the tomato arrived in Europe, the term *diet* referred to much more than just food; it meant maintaining individual health through a balanced way of life and good environmental conditions, by regulating the *sex res non naturales* or factors external to the nature of human beings that affected their health.<sup>32</sup> On the basis of Galen's writings, the *sex res non naturales* became the canonical categories that made up healthful private living.<sup>33</sup> In other words, as a

<sup>&</sup>lt;sup>29</sup> GERARDE, John. *The Herball, or Generall Historie of Plantes*, London: John Norton, 1597, pp. 275–76.

<sup>&</sup>lt;sup>30</sup> NIEREMBERG, Juan Eusebio. *Historia naturae, maxime peregrinae libris XVI distincta*. Ex officina Plantiniana Balthasaris Moreti, Antuerpiae, 1635, Lib. XIV, caput LXIV. "De tomatl, seu planta acinosa", p. 319.

<sup>&</sup>lt;sup>31</sup> CIENFUEGOS, Bernardino de. *Historia de las plantas*. (Biblioteca Nacional de Madrid, Mss 3357–3363), vol. 7, pp. 266–67

<sup>&</sup>lt;sup>32</sup> GARCÍA SÁNCHEZ, Expiración. "Comida de enfermos, dieta de sanos: procesos culinarios y hábitos alimenticios en los textos médicos andalusíes". In: MARÍN, Manuela & DE LA PUENTE, Cristina (eds.). *El banquete de las palabras: la alimentación en los textos árabes*. Madrid: CSIC, 2005, p. 58.

<sup>&</sup>lt;sup>33</sup> On the concept of diet and the *sex res non naturales*, see GIL-SOTRES, Pedro. "Introducción: Los *Regimina Sanitatis*". In: *Arnaldi de Villanova opera medica omnia*, X.1: *Regimen sanitatis ad regem aragonum*. Barcelona: Universitat de Barcelona & Fundaci, 1996, pp. 471–861, and also the classic studies by JARCHO, Saul (1970). "Galen's Six Non-



physician of the period put it, this consisted of "the regimen of the six things called natural, which are drinking, eating, exercise, washing, sleep, and wakefulness, venereal practice, passions of the mind: such as wrath, pleasure, sadness, fear, boldness".<sup>34</sup> All this is reflected in a long tradition of medical literature designed to provide advice on the most appropriate regimen of living to preserve individual health, and, specificially, on what was good or bad to eat. In the second half of the sixteenth century, eating was acquiring an increasingly important place in such texts compared with the other res; in other words, the part devoted to sleep, wakefulness, exercise and washing was gradually reduced in successive editions and the part on the medical study of food was increased. At the same time, these texts had a strong attachment to tradition: with very few exceptions, they did not include the "new foods" of American origin, which were already disseminated, known and consumed in Europe. It was the opposite attitude to the prompt incorporation of these same products into botanical texts, even though their origin was often not known. A paradigmatic example of this situation is the pair of texts written by Castore Durante, of which a great many editions were published in the period we are examining: whilst his herbal<sup>35</sup> is full of references to new plants, including the tomato, his *regimina sanitatis*<sup>36</sup> contains none at all and reproduces the foods that traditionally appeared in medieval texts.

Vegetables, in general, were considered bad for health, especially wild, uncultivated ones. After giving examples drawn from several classical authors and the odd contemporary source, Núñez de Oria refers to late sixteenth-century Castile, where he lived and practised medicine:

However, let us not quote examples from distant lands, but look instead at our own country, where we see from experience that those who eat salads and vegetables have all the colours of the rainbow in their complexions and faces. I do not say this to stop people having salads, but so that they do so in moderation, and make them from hot and cold vegetables, so that they temper each other.<sup>37</sup>

Naturals: A Bibliographic Note and Translation". *Bulletin of the History of Medicine*, 44, No. 4, 1970, p.372–77, and RATHER, Lelland J. "The Six Things Non-Natural: A Note on the Origins and Fate of a Doctrine and Phrase". *Clio Medica*, 3, 1968, 337–47.

<sup>&</sup>lt;sup>34</sup> "El regimiento de las seys cosas que dizen naturales, quales son la bevida, comida, el exercicio, el vaño, el sueño, y la vigilia, el uso venereo, pasiones del animo: como son yra, gozo, tristeza, temor, osadia." NUÑEZ DE ORIA, Francisco, *Regimiento y aviso de sanidad de todos los géneros de alimentos y del regimiento de ello...* Medina del Campo: Francisco del Canto, 1586, fol. 3v.

<sup>&</sup>lt;sup>35</sup> DURANTE, Castore, Herbario nuovo [...] con figure che rappresentano le vive piante che nascono in tutta Europa e nell'Indie Orientali et Occidentali... Roma: Bartolomeo Bonfadini & Tito Diani, 1585.

<sup>&</sup>lt;sup>36</sup> DURANTE, **Castore**, *Tesoro della sanità*, *nel quale si dà il modo di conservar la sanità et prolungar la vita et si tratta della natura de' cibi et de i rimedii, de i nocumenti loro...,* Roma: Francesco Zanetti, 1586. This *regimen sanitatis* went through more than twenty editions in the late sixteenth century and throughout the seventeenth.

<sup>&</sup>lt;sup>37</sup> "Mas empero no trayamos exemplos de tierras lexanas, sino vengamos a nuestras tierras, en las cuales por experiencia vemos que los que hacen comida de ensaladas y hortalizas tienen entre sus gestos y caras más diversos colores que el arco celestial, y esto no lo digo por quitar el uso de las ensaladas, sino para que en ellas se ponga moderación, y que se haga de hortalizas calientes y frías, para que las unas tiemplen a las otras." NuÑez DE ORIA, Francisco, *Regimiento y aviso de sanidad de todos los géneros de alimentos*, fol. 192r.



Aubergines and lentils were particularly harmful to health, so much so that the author entitled his chapters on them "On aubergines and the bad sustenance they provide" and "On lentils and their harmful effects when eaten".<sup>38</sup> On the other hand, lettuces were regarded as one of the few healthy vegetables: "if there is one vegetable that is good and nutritious it is the lettuce".<sup>39</sup>

Like the association of garlic and onions with the lower classes, the idea that vegetables were unhealthy was a generally accepted idea in society. Obviously, according to this whole dietary system, the tomato, given its characteristics and the fact that it was immediately associated with the aubergine and the Solanaceae family, could not be considered a healthy food, since it could quickly rot in the body, causing all kinds of harmful effects. Another case is that of potatoes and peppers. It has traditionally been pointed out that both the tomato and the potato were treated with great caution on account of their morphological similarity to the poisonous belladonna.<sup>40</sup> There are no statements on this point in the *regimina* sanitatis, but they are to be found in other types of sources on how the tomato became a foodstuff. Although in principle it was very harmful to health because of its wet, cold nature, as well as its botanical similarity to poisonous simples such as henbane, turning it into a sauce by lengthy cooking, the indispensable accompaniment to all food in the sixteenth and seventeenth centuries, largely succeeded in modifying its natural qualities and making it a more suitable food for human consumption. Dodoens, for example, in his Stirpium historiae pemptades sex, published in 1583 and regarded as the summation of all his works, concludes his discussion of the tomato plant, after describing its morphological features alongside an engraving of the plant, by saying:

Some eat the fruits prepared and cooked with pepper, salt and oil. However, they provide little bodily sustenance, and this is itself noxious and pernicious.<sup>41</sup>

In other words, a sauce was prepared from its fruits by adding salt, pepper and oil, although according to the Galenic conception of the properties of foods the resulting dish was very innutritious and pernicious to health. So the natural qualities of foods had to be balanced in the cooking process: the natural coldness of the tomato (and its acidity, which was harmful to health because it produced cold humours) is corrected with a hot spice such as pepper, whilst its wetness is counteracted by cooking. As Gentilcore has pointed out, in this first European recipe for preparing the tomato, which has nothing to do with Mesoamerican

<sup>&</sup>lt;sup>38</sup> "De las berenjenas y del mal mantenimiento que causan"; "De las lentejas, y sus daños, en via de manjar".

<sup>&</sup>lt;sup>39</sup> "Si entre las ortalizas ay cosa de buen nutrimento es la lechuga". NUÑEZ DE ORIA, Francisco, *Regimiento y aviso de sanidad de todos los géneros de alimentos*, fols. 245r and 202v.

<sup>&</sup>lt;sup>40</sup> NORTON, Marcy. "Tasting Empire: Chocolate and the European Internalization of Mesoamerican Aesthetics", *The American Historical Review*, 111, No. 3 (2006), pp. 660–91.

<sup>&</sup>lt;sup>41</sup> "Poma à nonnullis cum pipere, sale et oleo praeparata ac cocta eduntur. Praebent autem corpori alimenti quidem perquam exiguum, et hoc ipsum pravum ac vitiosum." DODOENS, Rembert, *Stirpium historiae pemptades sex. sive libri XXX*. Antuerpiae: Ex Officina Christophori Plantini, 1583, p. 455.



forms of preparation, the condiment counteracts or "corrects" the humoral qualities of the tomato, improving its texture and digestibility.<sup>42</sup>

Nevertheless (and this is another of the points that will be pursued in later stages of the study), there is abundant evidence of real tomato consumption and cultivation from the mid-sixteenth century onwards. Some allusions to consumption in natural history texts have already been cited in the previous section, but there are also references to the presence of tomatoes at the court of the Medicis in October 1548<sup>43</sup> and in the purchase book of the Hospital de la Sangre in Seville in 1608.<sup>44</sup>

On the basis of these ideas, a systematic trawl through books on cookery and agriculture (both printed and manuscript) is being carried out, with the object of discovering early allusions both to growing and to eating tomatoes, because, as Montanari says, "the civilization based on written texts can thus allow us to salvage something from an oral culture that, while not recorded directly in writing, has been reflected in an indirect but no less visible way".<sup>45</sup> For example, in his study on tomato recipes in Spain and Italy in the first centuries after Columbus, Rudolf Grewe points out that even in Italy the earliest references that included tomato were called *alla spagnuola* or "in the Spanish style". He also says that in what is now known as classic French cuisine, many of the preparations containing tomato are termed "Spanish", such as *sauce espagnole* or the family of sauces and garnishes called *andalouse*.<sup>46</sup> At all events, I have not located recipes with tomatoes in printed cookery books before the end of the seventeenth century, and in the Spanish Monarchy the first example is that of Juan de la Mata in his book published in 1747.<sup>47</sup>

Another essential topic is tomato farming and growing techniques and the appearance of the plant in agronomic treatises. One of the earliest European references to the tomato occurs precisely in a treatise on agriculture, by Philip II's gardener Gregorio de los Ríos. Specifically, it refers to "pomates", of which "there are two or three kinds. It is a plant that bears four-

<sup>&</sup>lt;sup>42</sup> GENTILCORE, David. *Pomodoro! A History of the Tomato in Italy*. New York, Columbia University Press, 2010, p. 16.

<sup>&</sup>lt;sup>43</sup> The Medici Archive Project. <u>http://www.medici.org/</u>. 18491. Mediceo del Principato 1174, fol. 1. Letter from Vincenzo Ferrini (Pisa) to Pier Francesco Riccio (Florence), 31 October 1548: "[...] Today another 58 barrels of wine arrived for the family [...] The cask of sweet red wine has turned out to be not at all sharp, but His Excellency [Cosimo I de' Medici] has not yet tasted it [...] I presented the tomatoes to Their Excellencies (I did not know what that basket was nor what was inside it), saying it came from the Gallo estate in Florence. And it was opened and they were all examined with great attention" ("[...] È venuto di nuovo hoggi 58 barrili di vino per la famiglia [...] La botte del vino rosso dolcie non riescie punto pichante ma Sua Eccellentia [Cosimo I de' Medici] non l'à anchora asagiato [...] I pomidoro, che non sapevo che panieri si fussi quello ne quel che vi fussi dentro, lo presentai a loro Eccellentie diciendo veniva di Firenze del Gallo. Et si aperse et chon grande considerazione si guardorano tutte").

<sup>&</sup>lt;sup>44</sup> HAMILTON, EARL J. "What the New World Gave the Economy of the Old". In: CHIAPPELLI, Fredi, ALLEN, Michael J.B. & BENSON, Robert L. *First Images of America: The Impact of the New World on the Old*. Berkeley: University of California Press, 1976, vol. 2, pp. 861–65.

 <sup>&</sup>lt;sup>45</sup> MONTANARI, Massimo. Food is Culture. New York: Columbia University Press, 2006, p. 41. Original title: Il cibo come cultura. Roma & Bari: Laterza, 2004.
<sup>46</sup> TAX FREEMAN, Susan. "Cocina española: platos españoles vestidos de viaje". In: VELASCO, Honorio M. (coord.). La

<sup>&</sup>lt;sup>46</sup> TAX FREEMAN, Susan. "Cocina española: platos españoles vestidos de viaje". In: VELASCO, Honorio M. (coord.). *La antropología como pasión y como práctica: ensayos "in honorem" Julian Pitt-Rivers*. Madrid: CSIC, 2004, pp. 95–104.

<sup>&</sup>lt;sup>47</sup> GREWE, Rudolf. "The Arrival of the Tomato in Spain and Italy: Early Recipes". *Journal of Gastronomy*, 3, No. 2 (1987), 67–81.



lobed fruits, which turn red and do not smell; they are said to be good for sauces, they have seeds, they usually last two or three years and they need a lot of water. There are others known as cairo".<sup>48</sup> I have been able to confirm that the reports in subsequent treatises are at most as succinct as this one, and this has led most of the authors who have addressed the history of the tomato to say that it was not widely consumed until the end of the eighteenth century and the beginning of the nineteenth. However, purely on the basis of sources related exclusively to Valencia, it has been possible to determine that by the beginning of the eighteenth century tomatoes were commonly grown and consumed. Let us take just two examples. In the *Libro de Despensa* (Kitchen Account Book) of the College of Corpus Christi in Valencia, containing meticulously itemised accounts of spending on food for the collegians' lunch and dinner, it is recorded that on Saturday 14 January 1746 they had "three cardoons, garlic, tomatoes and large peppers" for dinner, costing two *libras* and two *sueldos* in Valencian currency.<sup>49</sup> Another example occurs in *Agricultura general y gobierno de la casa de campo*, by the physiocrat José Antonio Valcárcel, published in Valencia in 1765, where the tomato is discussed as a common crop:

They are sown in well-tilled, well-dressed soil, and when the little bushes are well established, they are inspected, and regular cultivation and watering continue, and in this way they can be enjoyed very soon. But the usual and normal way is to sow them in December in a nursery or seedbed, as already explained for mulberries. From March onwards the little plants are transplanted a foot and a half apart from each other into prepared soil, which is divided with boards into plots with their irrigation channels, taking care to hoe them and water them at the appropriate times. The plants begin to bear fruit around the end of May, and they last until the frosts, with a succession of tomatoes, one lot after another, on the same plant. Some people set up what they call a bar, which is like a vault, as long as you like, a yard wide by a yard and a half high; it is made from canes or sticks and is well secured. The young bushes are planted at the foot of the two outer sides, proportionately spaced from each other, and as the stems grow they are trained over the stand so that eventually they completely cover it; in this position the tomatoes ripen well and quickly, and continue to fruit for quite a long time. Growers usually like to reserve some bushes which they raise up on trellises in a sunny spot or one sheltered from cold winds; in harsh weather they are covered with mats, as long as these do not touch the plants, which must be accessible to the air. And in this way they obtain very early tomatoes, and there are even cases in which the plants do not stop producing their little tomatoes, especially in mild winters. The stems of tomato plants can also be layered, and once the layers are well rooted they can be transplanted wherever you wish.<sup>50</sup>

<sup>&</sup>lt;sup>48</sup> "Hay dos o tres maneras. Es una planta que lleva unas pomas aquarteronadas, vuelvense coloradas, no huelen; dicen son buenos para salsa, tienen simiente, suelen durar dos o tres años, quieren mucha agua. Hay otros que llaman cairo." Ríos, Gregorio de los. *Agricultura de jardines, que trata de la manera que se han de criar, governar y conservar las plantas*. Madrid: Pedro Madrigal, 1592, p. 460.

<sup>&</sup>lt;sup>49</sup> Archivo del Real Colegio Seminario del Corpus Christi. Histórico. Despensa, fols 420r and 475v.

<sup>&</sup>lt;sup>50</sup> "Se hace la sementera en terreno bien labrado y abonado: y estando las maticas fuertes, se carean, y siguen las labores y riegos regulares, y de este modo se gozan muy tempranos. Mas lo común y ordinario es egecutar su siembra por diciembre



Therefore, pending a systematic sifting of sources, we cannot rule out the hypothesis that the tomato continued to be grown and eaten throughout the seventeenth century in the Mediterranean, whereas in Central and Northern Europe it had become a rare plant typically found in botanical gardens. Only on that basis could it have been so routinely and commonly present in texts written in Valencia in the early eighteenth century.

Finally, there are two further types of sources that indicate how common tomato consumption was during the seventeenth century: painting and literature. In painting, images of tomatoes have been located in the following works:

- JUAN VAN DER HAMEN, *Bodegón con frutero y dulces* (Still Life with Fruit Bowl and Sweets), c. 1623, Madrid, Banco de España Collection.
- JUAN VAN DER HAMEN, Vertumno y Pomona (Vertumnus and Pomona), 1626. Madrid, Banco de España.
- BARTOLOMÉ ESTEBAN MURILLO, La cocina de los ángeles (The Angels' Kitchen), 1646, París. Museo del Louvre
- FRANCISCO BARRERA (c. 1595–1658), *El mes de Julio* (The Month of July). Bratislava, Slovak National Gallery
- LUIS MELÉNDEZ (1716–1780), Bodegón con alcachofas y tomates en un paisaje (Still Life with Artichokes and Tomatoes in a Landscape), c. 1771. Private collection<sup>51</sup>

Gentilcore, for his part, has studied the representations of tomatoes on the door of Pisa Cathedral and in Italian painting of the late sixteenth and early seventeenth centuries.<sup>52</sup>

As for the appearance of the tomato in literary texts, a part of the project that is still at a very early stage, they will be treated, as in other studies of this kind, as an indirect source, but one that may reflect how tomatoes were really consumed. For this reason, a systematic trawl through literary texts of the second half of the sixteenth and the seventeenth centuries will need to be carried out to trace the presence of the tomato. In a previous study the Golden Age theatre was used not as a source of information per se, but in order to reveal

en plantel o almacera ya explicada para las moreras. De marzo adelante ya se transponen las planticas a un pie y medio de distancia una matica de otra en suelo preparado; y este dividido en tablares con sus regueras, se cuida de escardarlos y regarlos a sus tiempos: empiezan a dar fruto hacia últimos de Mayo, y duran hasta las heladas, sucediéndose los tomates unos a otros en una misma mata. Algunos disponen lo que dicen barra, que es como una boveda, larga a voluntad, ancha de una vara, y alta una y media: se la forma de cañas o palitroques, bien asegurada. Al pie de los dos lados exteriores se plantan las maticas, a una distancia proporcionada una de otra, y conforme crecen los brazos, se les dirige por encima de la barraca de modo que la llegan a cubrir toda: en esta postura maduran bien y pronto los tomates, y se mantienen en fructificar bastante tiempo. Por gusto suelen reservar matas, que levantan sobre encañizados a una solana o abrigo de los ayres frios: durante el tiempo rígido se cubren por encima con esteras, que no toquen las matas, sino que estas gocen de ayre. Y de esta suerte logran tomates muy tempranos, y aun sucede que no cesan de producir sus tomaticos, y más en inviernos templados. Los brazos de las tomateras también se pueden amugronar, y bien arraygados los mugrones, trasplantarlos donde se quiera." VALCÁRCEL, José Antonio. *Agricultura general y gobierno de la casa de campo...* Valencia, por Joseph Esteban Dolz, Impressor del Santo Oficio, 1765. Vol. X, pp. 339–40.

<sup>&</sup>lt;sup>51</sup> The list of paintings containing images of tomatoes was provided by María José López Terrada.

<sup>&</sup>lt;sup>52</sup> GENTILCORE, David. *Pomodoro! A History of the Tomato in Italy*. New York: Columbia University Press, 2010, pp. 21–25.



the nature of the audience's familiarity with medicine and plants,<sup>53</sup> since, as Salomon pointed out when discussing the rural world, "the theatre has its own rules, but it is not unconnected with reality".<sup>54</sup> In other words, it is a source that enables historians to obtain a fascinating insight into non-academic scientific knowledge at a time when the theatre was something of a national obsession. We must bear in mind that although dramatic texts were an elitist, urban phenomenon, being written in a largely illiterate society, they reached and were shared by a wide audience when performed, and there was therefore a common language between the audience and the dramatist: the stage is the point of contact between the text and its public, "as it encodes the message [...] making it accessible to the audience".<sup>55</sup> So we can see how texts written in the late sixteenth and early seventeenth centuries use the term *tomato*, enabling us to state that this product was well known to the population of the Spanish Monarchy in the early seventeenth century. Just a few of these references will be cited here. In Lope de Vega's play *La octava maravilla* (The Eighth Wonder), written and performed in 1618, one of the characters says:

What sweet pleasure the touch of this doubloon has given me! How majestic they are! How pleasing to the ear! If Parnassus will forgive me, The verses of Garcilaso And the music of Juan Blas Make no more delightful sound. To take is heavenly, lovelier Than a book by Cicero Or a tomato in season. I prostrate myself before you. I am your slave.<sup>56</sup>

<sup>&</sup>lt;sup>53</sup> SLATER, John. *Todos son hojas: literatura e historia natural en el barroco español*. Madrid, CSIC, 2010 has studied the presence of the long lists of plants in Baroque literature. On medicine and the theatre, see SLATER, John & LÓPEZ TERRADA, María Luz. "Scenes of Mediation: Staging Medicine in the Spanish Interludes". *Social History of Medicine*, 24, No. 2 (2011): 226–43.

<sup>&</sup>lt;sup>54</sup> SALOMON, Noël, *La vida rural castellana en tiempos de Felipe II*. Barcelona: Ariel, 1988, p. 13.

<sup>&</sup>lt;sup>55</sup> GRUBBS, Anthony J., "Major Changes in 'Minor' Theater: Luis Quiñones de Benavente's Dramatization of Dramatic Theory and its Effects on the Interlude in Early Modern Spain". *Hispanofilia*, 151 (2007): 1–20, p. 2.

<sup>&</sup>lt;sup>56</sup> "Lindo gusto he recebido, / del tacto deste doblón, / iOh que soberano son! / iOh como alegra el oydo! / No le regalaran más, / aunque perdone el Parnaso, / los versos de Garcilaso, / ni los tonos de Juan Blas. / Tomar del cielo más lindo, / que un tomo de Cicerón, / más que un tomate en sazón, / a ti me humillo, y me rindo. / Tu esclavo soy." VEGA CARPIO, Lope de, *Comedias de Lope de Vega. Parte X*, coord. Ramón Valdés Gázquez & María Morrás, Lérida: Milenio-Universitat Autònoma de Barcelona, 2010, vol. II, pp. 891–1041.



In *Amor médico* (Love the Doctor) by Tirso de Molina there is a reference not only to the tomato but also to it being eaten in salads:

Oh silk serge, Oh fine skirt, Oh tomato salads With rosy cheeks, Sweet and sharp at the same time!<sup>57</sup>

Finally, in a spiritual colloquy by Sor Marcela de San Félix, Lope de Vega's daughter and also a dramatist, entitled *La muerte del apetito* (The Death of Appetite), the character of that name says to the one called Soul:

I would like them to make me A black pudding, with a nice sausage, And not a small one, For my hunger has no limits. I would like something served cold, and a salad of tomatoes and cucumbers. How many kinds of wine Are there in the pantry?<sup>58</sup>

The inclusion of both still life painting and Baroque literature as sources for the history of the tomato obviously requires a much more complex and profound analysis, but these examples, even taken out of context, are an excellent indicator of how commonly tomatoes were eaten in the Spanish Monarchy in the late sixteenth and early seventeenth centuries, despite how it might appear judging solely from what is found in printed sources.

<sup>&</sup>lt;sup>57</sup> "¡Oh anascote, oh caifascote, / oh basquiña de picote, / oh ensaladas de tomates / de coloradas mejillas, / dulces a un tiempo y picantes." MOLINA, Tirso de. *El amor médico*, ed. Blanca Oteiza, in *Obras Completas. Cuarta parte de comedias I*. Madrid: Revista Estudios; Pamplona: GRISO-Universidad de Navarra, 1999, Act I, scene VI, line 805.

<sup>&</sup>lt;sup>58</sup> "Quisiera que una morcilla / me hicieran, y un rellenico; / no le hagan pequeñico, / que es sin límite mi hambre. / Alguna cosa fiambre / quisiera, y una ensalada / de tomates y pepinos. / ¿Cuántas maneras de vinos / Han entrado en la despensa?" The text used is that of IntraText (2007): Sor Marcela - Obra completa: http://www.intratext.com/IXT/ESL0014/\_PN.HTM#5B5.