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"Plantain of Guinea". The Atlantic Adventure of Banana

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Resumen- ***“Plátano de Guinea”. La aventura atlántica del plátano.*** **Se estudia el proceso histórico del primer traslado de musáceas [*Musaceae*] a las Antillas, junto con la caña de azúcar, en el contexto de una red trasatlántica. Se analizan críticamente textos históricos; se muestran evidencias sobre cultivos y especies en Europa, África y archipiélagos de la Macaronesia; se comentan errores históricos de larga duración y se plantean algunas hipótesis sobre el transporte atlántico de biotipos o híbridos durante el siglo XVI.**

Palabras clave: musa spp., bananas y plátanos, historia de las musáceas, historia cultural.

I. Introuction

In 1736 Linnaeus dedicated a monograph to the *Musa cliffortiana* and, in the epilogue, in order to praise its beauty and eulogise the global diffusion of its cultivation, he included an elegant composition (Linnaeus, 1736: 50) by the neo-Latin poet Hendrik Snakenburg:

> Salve; hospitali sede beatior,
> Quam si vel Indus vel Tropicus tuo
> Pinguescat e fructu, et saporis,
> Musa, satur nihil optet ultra.

This monograph, as Mark Griffiths has highlighted, allowed Linnaeus to refine his method and taxonomic system (Griffiths, 2007: 23, 25). Half a century ago, the Colombian botanist and historian Víctor Manuel Patiño (1912-2001) held that the division which is usually made between plantains (*Musa paradisiaca*, *Musa* spp.) as vegetable or starchy vegetable substitute for bread, and bananas (*Musa sapientum*, *M. Cavendishi*, etc.) as fruit of consumption like a dessert or sweet, was a rbitrary regarding a large part of equin octial America, since both plantains and bananas were used green, as a vegetable or because of its starch, and when mature both were consumed as fruit (Patiño, 1969: 297-298).

With few exceptions, the familiar eating bananas are naturally occurring hybrids among the various subspecies of *Musa acuminata* and interspecific hybrids between *M. acuminata* and *M. balbisiana* (Ploetz *et al*., 2007). These same authors highlight that

> *Musa* taxonomy is confused by several factors including the sterility, ancient domestication, and hybrid origins of the cultivated varieties (cultivars), and the unwillingness of many to adopt newer, correct names. For example, Linnaean binomials such as *M. paradisiaca* (French plantain) and *M. sapientum* (Silk) are still used decades after the cultivars to which these names refer were recognized as *M. acuminata* x *M. balbisiana* hybrids (Ploetz *et al*., 2007).

The relevance of the *Musaceae* could be appraised according to four essential concepts, as Nelson, Ploetz and Kepler emphasise. Firstly, its “extraordinary significance to human societies, produces the fourth most important food in the world today (after rice, wheat, and maize), bananas and plantains”. Secondly, the fact that “*Musa* species grow in a wide range of environments and have varied human uses, ranging from the edible bananas and plantains of the tropics to cold-hardy fibber and ornamental plants”. Thirdly, its evolution and genetic diversity: “These large, perennial herbs, 2-9 m (6.6-30 ft) in height, evolved in Southeast Asia, New Guinea, and the Indian subcontinent, developing in modern times secondary loci of genetic diversity in Africa, Latin America, and the Pacific”. And, in short, despite it is not regarded as “invasive, *Musa* nonetheless is a persistent plant that competes relatively well with other species with-in managed agro-forestry settings” (Nelson *et al*., 2006).

II. Tempus Adventus

When did the *Musaceae* arrive in the Canary Islands before moving to the New World? “Thomas Nichols, who enumerated several introduced crops he saw on his visit to Madeira and the Canary Islands in 1526 [sic], used the Spanish word *plátano* to describe his first encounter with the plantain”, and he stated about the fruit of the *plántano* [sic] that “when it is ripe it is blacke, and in eating more delicate then any conserve” (Carney & Rosomoff, 2009: 41-42). However, this must have occurred around 1556, when Nichols

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visited the Canary Islands for the first time, since "according to his own words, it seems that he was born in the city of Gloucester by the year 1532" (Castillo, 1992: 66).

The first edition of his book, *A Pleasant Description of the Fortunate Ilandes, called the Ilands of Canaria, with their straunge fruits and commodities*, was published in London (1583), and later on the work was spread by Richard Hakluyt in *The Principal Navigations, Voyages and Discoveries of the English Nation* (London, 1589-1600). This contributed to forge the image of the Canary Islands in England, at least until late in the eighteenth century (Castillo, 2000: 75-76; Castillo, 2009: 31).

The text by Nichols about bananas, as reproduced by Hakluyt, reads:

> but especially the PLANTANO which groweth neere brooke sides, it is a tree that hath no timber in it, but groweth directly upward with the body, having marvelous thicke leaves, and every leafe at the toppe of two yards long and almost halfe a yard broad. The tree never yeeldeth fruit but once, and then is cut downe; in whose place springeth another, and so still continueth. The fruit groweth on a branch, and every tree yeeldeth two or three of those branches, which beare some more and some lesse, as some forty and some thirty, the fruit is like a Cucumber, and when it is ripe it is blacke, and in eating more delicate then any conserve (Hakluyt, 1599, II (2): 316).

The error which sets Nichols' visit to the Canaries in 1526 is very old since it stems from the travels' compilation by Hakluyt, who placed a brief "note concerning an ancient trade of the English Marchants to the *Canarie-ilands*", in which it is alluded to the year of Lord 1526 (Hakluyt, 1599, II (2): 315). Some years after this edition, in 1629, the French Pierre Bergeron (c.1580-c.1637) collected it in his *Traité de la Navigation* (Bergeron, 1629: 220; Bergeron, 1735, I: col.116), from whom must have took it, in turn, José Viera y Clavijo (Viera y Clavijo, 1772, I: 47; Viera y Clavijo, 1950, I: 55). Bergeron (1629: 225-226) also reproduced the description about bananas made by Nichols.

Much later authors followed the trail of the anachronism. Bonnet translated the text and published it in Castilian in 1933, based on the cited edition (1599) of the collection by Hakluyt. This earned him the applause of the Canary Islanders historians of the period, who indicated that "Mr. Bonnet has rendered a great service to the history of the Archipelago by translating into Spanish such an interesting account". The article was entitled "Description of the Canaries in the Year 1526, Made by Thomas Nicols [sic], English Factor". He included, annotated, the description of the *plántano*: "estando muy maduro, la cáscara se ennegrece; es por demás delicioso al gusto que la más regalada conserva que se pueda hacer" (Bonnet, 1933: 209; Benítez-Padilla, 1959: 144).

Nichols had also written about sugar production in Tenerife, where he said "there are 12 sugar houses called *Ingenios*", and drew attention to the extraordinary fertility of the Valle de La Orotava, "there is also one league of ground which […], it is thought that the like plot of ground is not in all the World" (Hakluyt, 1599, II (2): 317; Bonnet, 1933: 210-211), centuries before Humboldt did it.

The cultivation of sugarcane in the Canaries was initiated, in the last quarter of the fifteenth century, with plants from Madeira. In 1502 the conqueror of La Palma and Tenerife, Alonso Fernández de Lugo, transferred to Catalan merchants some of his lands in Los Sauces (La Palma), a "very rich in sugarcane plantations" zone, where other settlers from Catalonia also invested (Pérez-Vidal, 1983, II: 309; Fabrellas, 1952: 457-459). Slavery was inserted in this plantation economy. The trade between the Canaries and Africa was already common at this time since the routes had been opened a long time ago by the Portuguese (Aznar *et al*., 2012: 55-63).

Unfortunately there is no complete evidence, apart from what Gonzalo Fernández de Oviedo says, on early dates, about the presence of *Musaceae* in the Canaries. The poet Vasco Díaz Tanco could see bananas in the Islands around 1525, since he sang to them in his *Triumphos*, which were published in Valencia around 1530 approximately. In the stanzas by this poet from Extremadura local and foreign plants were mixed: "vi plátanos, cedros y linaloeles [aloe]", assuming, of course, that he refers to *Musaceae* and not to *Platanaceae*. He also praised the dragon trees (*Dracaena Draco* L.): "vi dragos perfectos muy medicinales" in the same stanza (Rodríguez-Moñino, 1934: 14, 21; García-Arranz, 1989: 30).

Another poet, Bartolomé Cairasco de Figueroa (1538-1610), born in Gran Canaria, mentions the voice *plátano* on several occasions. It seems clear that in the first part of its monumental *Templo Militante*, the reverent allusion is to the Virgin Mary, according to the biblical quote *et quasi Platanus exaltata sum iuxta aquas*; so there can be no doubt that he refers to *Platanus* × *hispanica* or London planetree. Probably, also comment on this tree the verses dedicated to Doramas, islander hero against conquest, born to freedom in the jungle of his name:

> Plátano, Fuente, amomo inusitado:
> En cuyo gremio estuvo nueve meses,
> El divino Doramas retirado
> (Cairasco, 1615, IV: 282).

It is of great interest the testimony of the nobleman-soldier-priest Juan Ceverio de Vera (Las Palmas [Gran Canaria], 1550-Lisbon, 1600), who travelled through America (Hispaniola, Panama,

Colombia, Peru, Quito) between 1567 and, approximately, the late 1580s (Borges, 1980: 354, 358). In 1595 he went on a journey to the Holy Land, and in Tripoli (Lebanon) he not only saw bananas, but he also related them to the Canaries, to the Iberian Peninsula and to the New World. The first edition of his book, printed in Rome, is of 1596:

> I also saw bananas brought from Egypt, which is healthy and exquisite fruit; and although the trees have come from Canaria [Gran Canaria] to Spain, they are destroyed by the cold, because they want a temperate land and being in the streams of water; they give a single fruit, and being mature, the tree dries and leaves in place many sprouts. And in the Indies [West Indies] there are so many, that in the mountains they are raised without profit or owner (Ceverio de Vera, 1598: 93-94; Martínez-Figueroa & Serra-Rafols, 1964: 112).

In 1645, a group of Spanish Capuchins received bananas in Gran Canaria, during a layover of the missionary journey they went on to Congo. In Las Palmas, where they were feted, they were offered food in abundance, but they "only took a few lemons and fruits from India [sic], which in Canaria is called plátano; of which there are much abundance in the Congo, called *nicefos* in the language of that kingdom" (Pellicer de Tovar, 1649: 5).

These friars were very interested in the acclimatisation of trees in the Congo region. "There are not pears, apples or other similar to these, or born, although they sow them, as the religious have confirmed by experience"; but "three genus" of plants grew well there; in the first place the *niceffo* or *nicefo*, and then the ananas and the coconut palm. The *nicefo*, fairly extended, was grown throughout the year,

> Its trunk is not wood like the other trees, but made of the same leaves multiplied one upon another, which then spread on top and make a beautiful crown [...]. This plant or tree produces a very large cluster, full of *nicefos* (Pellicer de Tovar, 1649: 52-53).

Giovanni-Antonio Cavazzi da Montecuccolo (1621–1678) also referred to the *niceffo*, of which he reproduced some pictures, and he talked about its cultivation in Angola: "Il Niceffo, che gli Ambondi chiamano Maongio-à-Camburi, e pianta utilissima, [...] e produce una pigna capace di cento, sino a ducento frutti somigliantissimi a cetrioli". In addition, he recommended it for dysentery sufferers: "cibarli con frutti acerbi del Niceffo" (Cavazzi da Montecuccolo, 1687: 35-36, 143), so it could be a variety of cooking.

In 1678 Friar José de Sosa, talking about Las Palmas, described the "platanales which guard its shores and often serve as hedges". He also pointed out that the monastery of San Francisco had been founded in the most cheerful part of the town, and that in its magnificent vegetable gardens there were grown "sour fruit trees, plantanales [sic] and other fruits" (Sosa, 1849: 24-25; Sosa, 1941: 34 y 36).

Tomás Arias-Marín de Cubas (1643-1704) claimed in turn that in the late fifteenth century two vessels were chartered in Gran Canaria in order to defend the island from pirate attacks. The ships arrived in Guinea, where they took "blacks to service in the sugar mills", and brought "potatoes, maize, banana roots, yams, and other seeds" (Arias-Marín de Cubas, 1986: 220-221; Bonnet, 1933: 209-note 5). But this information raises doubts because of its inaccuracy and because it incorporates, at that time, maize and potatoes to the credible import of other plants and seeds.

The cultivation of vegetable gardens of platanales continued, however, during the seventeenth and eighteenth centuries (Rodríguez & Macías, 2012: 144). In La Gomera the banana was incorporated into the feast of proclamation of Luis I de Borbón (1725), in the town of San Sebastián, where "the church was seen the next day adorned with bananas and its clusters, and the procession accompanied by the confraternities", although in a certain way its uniqueness was stressed. But it is described in Hermigua where, "in olden days, there was *hazas* of sugar plantations and two sugar mills, today there are only vestiges", and in the *Valle de la Negra* [*Valley of the Black*], "covered by platanales and *iñames*" (*Dioscoreaceae*). In Los Sauces (La Palma) still existed the "sugar mill", the water flowed clear and there were "bananas, dates, lemons" (Viera y Clavijo, 1776, III: 66-67, 91, 93, 498; Viera y Clavijo, 1951, II-III: 450, 466, 467, 763).

The same could be said of Igueste de San Andrés (Santa Cruz de Tenerife), where throughout the eighteenth century small vegetable gardens of bananas and yams were sold. Not far away, the powerful *ingenio* of Taganana had operated with Portuguese technicians, free employees and slaves since the early sixteenth century, and the same could be said about the fertile lands of the Valle de La Orotava (Viña-Brito, 2006a: 363-364; Rivero-Suárez, 1990: 19-33).

There is something undeniable about all this. *Dioscoreaceae* and *Musaceae* subsisted in the Canaries, especially in areas which had stood out because of their sugar mills during the sixteenth century, since around the end of this century sugar production decreased. It was about irrigated regions where slaves had resided. In these strongholds, where it should have been cultivated at the same time as the sugarcane plantation, bananas survived as a mute witness of a special agrarian, food and, obviously, cultural past.

III. Sugar, Bananas and Slaves

But when, exactly, did the first *Musaceae* arrive in the Canaries? At different times several authors from distinct scientific fields have echoed the "old tradition" of the arrival of the banana in the Canaries sometime in the fifteenth century, coming from Guinea and brought by Portuguese (López-Gómez, 1972: 16; Pérez-Marrero, 2000: 23; Ramírez *et al*., 2013: 53; Lassoudière, 2010: 117-118; Hall, 2009: 26; Crane & Balerdi, 2012, etc.).

On this subject, Langdon writes, "as far as Simmonds is concerned, the banana was carried by the Portuguese from Africa to the Canary Islands some time after 1402" (Langdon, 1993: 16; Simmonds, 1966: 313; Marin *et al*., 1998: 968). It has even been suggested that bananas "seem to have been brought from Guinea by two Franciscan friars" (Martínez-Figueroa & Serra-Rafols, 1964: 192), but the source is not indicated.

Viera y Clavijo also includes this ancient tradition in his *Dictionary of Natural History* when he states that the French gave to the banana the name of "*bananier*, taken from that of the *banano*, which is the one given to it by the natives of Guinea, from whose coast is tradition, the *plátano* was brought to our Islands" (Viera y Clavijo, 1869, II: 200-201). Nevertheless, a tradition is not evidence, and therefore this issue should be further specified.

The occupation of the eastern islands of Lanzarote and Fuerteventura by Jean de Béthencourt and Gadifer de La Salle, in 1402-1404, could not cause the cultivation of any type of *Musaceae*, as the plant does not occur on any of these islands. They have always produced cereals and, partially, grapevine, but the two islands are very poor in water resources, thus making it impossible to plant bananas or sugarcane. They were the granary (cereal producers) of the Canaries when it rained. With absolute certainty the amusing *Figure 9.7* (Camel transporting bananas with donkey in background, Canary Islands, n. d.), included by Carney & Rosomoff (2009: 165), and taken from Simmonds, does not refer to the Canaries: neither the child nor the clothing or the landscape is characteristic of the Archipelago. It is probably somewhere in the NW continental Africa.

The island of El Hierro, which joined as well the lordly conquest, also lacked sufficient water; in fact, the water used to drink was that distilled by the *Garoé*, a mythical tree, probably a variety of *Ocotea foetens*, by a phenomenon of horizontal rain. Nowadays, El Hierro has bananas and tropical fruits such as ananas, but these cultivations began in the last third of the twentieth century.

The great development of the banana in the Canaries came from the mid-nineteenth century, when the Englishman Alfred Diston introduced, from greenhouses in the UK (Paz-Sánchez, 2008: 69-70), the *Musa Cavendishi* that revolutionised the agricultural economy of the Archipelago thanks to the high European demand (Nuez-Yánez, 2005: 154; Macías-Hernández, 2011: 241).

The Crown of Castile dealt directly with the organisation of the conquest of the three islands which, in the last third of the fifteenth century, were still unoccupied. Thus, Gran Canaria was conquered between 1478 and 1483, La Palma between 1492 and 1493, and finally, Tenerife between 1494 and 1496. On these three islands (and to a lesser extent in La Gomera, which had a lordly jurisdiction) occurred, after the conquest, a remarkable development of the sugar plantation, whose works demanded importing slave labour: Blacks, Moors and baptised Moors. The first sugar mill began its work in Gran Canaria immediately after the conquest (Fernández-Armesto, 2002: 519).

Canary Islander planters acquired black slaves mainly in three ways: a) by means of exchanging captured Muslims in the Barbary area, which "was made in exchange for blacks from Guinea"; b) by purchasing to slave ships or Portuguese merchants who "travelled through the islands offering their human merchandise" (Rumeu de Armas, 1947: 84) to sugar mills and workplaces; and c) by expeditions led by the Canary Islander settlers themselves (against the international treaties) to the ports of Senegal, Guinea, Cape Verde or Magarabomba [Sierra Leone] (Lobo-Cabrera, 1983: 102-104; Aznar, 1983: 212-214; Fuentes-Rebollo, 2002: 238, 274; Rosa-Olivera, 1978: 184, 227, 236-237; Viña-Brito, 2006a: 376; Cortés-López, 1989: 44, 107-108; Green, 2012: 69, 81, 90, 133, 183).

Cape Verde became a usual market for the black slaves supply to the Canaries. In 1494, a Portuguese neighbour of Gran Canaria, along with two Spanish, armed caravels, went to Guinea and "caught, stole and captured many souls of blacks from Guinea and so brought them captives" (Lobo-Cabrera, 1983: 104; Pérez-Embid, 1948: 227). The monarchs were forced to ban Canary Islanders and Castilian settlers' raids into Guinea by several royal orders between 1477 and 1516 (Viña-Brito & Macías, 2012: 57, 226, 376).

In April 1503, the Catholic Monarchs ordered Juan de Silva, senior lieutenant of Seville, to arrest the guilty and to return to the king of Portugal

> certain blacks, melegueta, and other things that some neighbors of Lepe, Palos, Triana and Alcalá del Río took in Guinea where it was said Manicongo, in Santo Tomé, Príncipe island, Fernando Poo and Melegueta Coast, which was the land belonging to the king of Portugal and where they continually used to go to rescatar [swap] their vassals (Lobo-Cabrera, 1983: 104; Cortés-López, 1989: 156).

The gathering of melegueta pepper or Guinea grains (*Aframomum melegueta*), in Grain Coast [Liberia], came to demonstrate the ease with which slave trader could be involved in the introduction of spices and

possibly of plants that they could market in their places of origin.

To the Canaries, essential link in the chain connecting the Old and the New World, some *Musaceae* should be moved in the late fifteenth century by Castilian, Catalan, Valencian, Portuguese or Genoese colonists who actually were going to look for slaves and spices. This move could occur between 1483 and early 1500, and would include taxa from Guinea-Congo and perhaps from the Senegambia region and Cape Verde.

IV. In Transitu Ad Novum orbem

When did the plantain or banana come to the New World? The testimony of Fernández de Oviedo, who, provisionally is the closest to the facts, clearly expresses that it happened in 1516, from Gran Canaria to Hispaniola, and that it was the Dominican Friar Tomás de Berlanga who carried it out. This is an accurate testimony which has been accepted by hundreds of scholars throughout time.

The first reference to banana can be read in the *Summary*, i.e., in the work *Oviedo de la natural hystoria de las Indias*, which was printed in Toledo on February 15, 1526:

> from Spain were brought the first, and they have multiplied so much that it is a thing of wonder to see the abundance that there is of them on the islands and in Mainland, where there are villages of Christians, and they are bigger than better and of better flavour in those parts than in these (Fernández de Oviedo, 1526: XLIIJ).

In *La historia general de las Indias*, published in Seville (Juan Cromberger, September 30, 1535), we read (book VIII, chap. I, § X):

These were not in these Indias, and were brought to them […] (Fernández de Oviedo, 1535: LXXIX).

> They were brought from the island of Gran Canaria in the year MDXVI [1516] by the Reverend Father Friar Tomás de Berlanga of the Order of Preachers to this city of Santo Domingo and from here they have extended [...]. The first were brought as I said from Gran Canaria, and I saw them there in the same city at the monastery of San Francisco in the year MDXX [1520], and so there are some of them in other Fortunate islands or Canary Islands. And I have also heard that there are some in the city of Almería in the kingdom of Granada: but to the true [...]: this fruit is from the Levant and the East India according to Genoese, and Italians and Greeks merchants [...] (Fernández de Oviedo, 1535: LXXIX *v*-LXXX).

And these came here owing to that Reverend Father Friar Tomás de Berlanga, to whom meritoriously the Imperial Majesty has made the mercy of the Bishopric of Castilla del Oro in Tierra Firme (Fernández de Oviedo, 1535: LXXX *v*).

The edition of Salamanca, in the office of Juan de Junta, was completed on May 2, 1547 and is entitled *Coronica de las Indias: la hystoria general de las Indias*, "corrected and amended". It does not offer significant differences on this point.

Now then, book VIII, chapter I, § 10 of the scholarly edition of 1851, by José Amador de los Ríos, shows striking changes in the paragraph referring to Almería:

> As to the truth they cannot be called plátanos (nor they are so); but that which is, *según he oído a muchos*, was brought this lineage plant from the island of Gran Canaria, the year one thousand five hundred and sixteen, by the Reverend Father Friar Tomás de Berlanga [...]. And I have also heard that there are some in the city of Almería in the kingdom of Granada, *y dícese que de allí pasó esta planta a las Indias, y que a Almería vino del Levante y de Alejandría, y de la India oriental*. I have heard Genoese and Italian and Greek merchants […] (Fernández de Oviedo, 1851, I: 291-292).

Does Fernández de Oviedo want to indicate that the plant could also be moved from Almería to the New World? So it seems, by judging the preceding text, which would be based on the manuscripts recovered in the nineteenth century and which, according to the "Warning" of the publisher, had suffered "great additions and amendments" by the hands of the author himself (Fernández de Oviedo, 1851, I: V-VI). The same text, with minor spelling changes, in the edition by Juan Pérez de Tudela (Fernández de Oviedo, 1959, I: 248).

V. Al-Andalus Gardens

Did bananas continue to be cultivated in Andalusia during the sixteenth century, as had happened in the Muslim period? Of course to a much lesser extent, but it seems that it was so. There is a testimony that even documents the eventual consumption of the fruit among certain courtiers. The doctor of Felipe II, Juan Fragoso, stated it; he was a man of a "balanced critical spirit" (Calbet, 1988: 7). Fragoso wrote *Discursos de las cosas aromáticas* (1572), and said about the "fruit called Musa" that

> This plant is known today in Almería, from where the fruit has been sent to some gentlemen of this Court, being a great gift and with good reason, being of such an exquisite and rare tree. These figs at first to be tasted, give discontent; but if one continues using them the person who eats them is not sick of them (Fragoso, 1572: 168).

Fragoso was an influential man. It was pointed out that he was one of the first Spanish doctors to quote Paracelsus; that he was fellow countryman, friend and classmate of Francisco Hernandez; and that his *Discourses* were not only about Asian plants, but also about many American plants, copying García da Orta

and Nicolás Monardes (López-Piñero & Pardo-Tomás, 1996: 28, 52, 112; Fresquet-Febrer, 1995: 76-77).

Actually, Fragoso was inspired by the commented edition that Carolus Clusius had made about the celebrated *Coloquios dos simples, e drogas he cousas mediçinais da India* (1563) by the Jewish-Portuguese physician and botanist García da Orta (c. 1499-1568). Wisely, Clusius had decided to comment and publish this work in Latin, and his work is not a simple translation, but a scholarly study which preserved the authorship of Orta under the title *Aromatum et simplicium aliquot medicamentorum apud Indos nascentium historia* (1567).

Accompanied by Jakob Fugger, Clusius had visited Spain and Portugal in 1564. As a result of that journey he discovered the *Coloquios dos simples* by the Lusitanian and, impressed by his newness, he decided to translate the work immediately (Barona-Villar & Gómez-Font, 1998: 30-31). During his stay in Lisbon Clusius saw some bananas, which had a low fruition, but which were there, as if to prove they existed. The plant was known as Figuera Banana:

> Vlysipone, ubi aliquot plantas vidi, minime tamen fructiferas, nomen hoc retinet; vocant enim etiamnum Figuera Banana, id est, ficum Bananas ferentem (Orta & Clusius, 1567: 222; Clusius, 1605: 230).

José de Acosta, author of the influential *Natural and Moral History of the Indies* (1590), which Humboldt did not cease to praise, however had pointed out that the *plátano de Indias* did not grow in Spain or Italy, where grew the *Platanus* (Acosta, 1590: 248-249). But Juan de Guzmán, the first translator into Castilian (1586) of the *Georgics* by Virgil (Herreros, 1998: 192, 395, 419; Morreale, 2002: 597, 601, 615), was more prudent when he wrote the hemistich *et steriles platani malos gessere valentes* (*Georg*. 2, 70), saying that these *Platanus* were

> different from those of the Indies [West Indies], because in Seville there are those of the Indies, although they do not bear fruit here like they do there, and are small in comparison, it can thus be inferred that they were those brought from Asia (Guzmán, 1795, II: 189-190).

The cultivation of banana varieties among Spanish Muslims is a fact known and debated in the context of discussions on irrigation in Al-Andalus and its socio-political implications (Glick, Thomas F., 1994: 974; Retamero, 2009: 276; Essa & Ali, 2010: 61). Crops of *Musaceae* and other species, which required enough water and special care, were successfully introduced by means of specific hydraulic techniques. In the *Calendar of Cordoba* (attributed to Ibn Sa'id, tenth century), in the *Compendium of Medicine* (Abd al-Malik Ibn Habib, 790-c. 853) and in the *Anonymous Andalusian Calendar* (thirteenth century) there are mentioned the sugarcane (qasab al-sukkar), the cotton (al qutun), and the banana (al-mawz). According to the chronicle by Ibn Hayyan (eleventh century) during the first half of the ninth century, in the Cordoba court of Abd al-Rahman II it was discussed "the characteristics of the banana (al-mawz)" (Trillo-San José, 2004: 46-47, 50).

In the process of receiving and diffusing these vegetables in the West, it has to be taken into account, together with the commercial tradition of the Arabs, the "extensive kindred networks and the obligation of hospitality with friends and pilgrims". It has also been studied the introduction in Al-Andalus of the main varieties of *Musaceae* (Watson, 1983: 51; Watson, 1998: 117; Trillo-San José, 2004: 46-50).

The agronomist Abu Zacaria Iahia [Ibn al-Áwwam, Yahyà b. Muhammad], who flourished in Seville during the twelfth century, dedicated an interesting epigraph to the *Musaceae* in his *Book of Agriculture*, where he counseled a number of practical care for the cultivation and conservation of the fruits (Boutelou, 1878, I: 228-229).

VI. Fernández De Oviedo, Anghiera Y Varthema

Patiño (in several adaptations of his manual on *Cultivated Plants and Domestic Animals in Equinoctial America*, 1963-1969) considered that, if the banana had been moved from Andalusia to America and not from the Canaries, it would also be "clones adaptable to high latitudes". Moreover, he drew attention to the doubts raised by the text by Fernández de Oviedo (editions of 1851 and 1959) because he introduces certain inaccuracies ("as I have heard from many" or "it is said that from there moved"); because he indicates that he first saw bananas in 1520 in the Franciscan monastery of Las Palmas; and, as well, because he quotes the works by Anghiera and Varthema in order to describe the plant (Patiño, 1969: 300).

However, Fernández de Oviedo had ratified all the time the famous move and, besides, he had praised the merits of Berlanga when he was appointed Bishop of Castilla del Oro (Colombia-Isthmus), as already mentioned (Fernández de Oviedo, 1535: LXXX *v*; Fernández de Oviedo, 1851, I: 293; Fernández de Oviedo, 1959, I: 249-250).

On the other hand, it seems that he simply turned to the cited authors in order to get the necessary information and to provide a correct classification of a crop that he considered very useful. The surly though sharp Pietro Martire d'Anghiera had written about this unique biotype:

> De arbore, quam potius caulem appellauerim, quod sit vti carduus, medullosa non solida, quamuis ad lauri celsitudinem surgat, multa sunt repetenda, facta est mentio breuis de hac in primis decadibus (Anghiera, 1530: C).

Text which Torres-Asensio had no difficulty in translating as follows:

> About the tree, which I better call cabbage because it is like a fluffy thistle, not solid but as high as the laurel, many things have to be repeated: in the first Decades it had been mentioned (Torres-Asensio, 1892, IV: 205).

Thus, what Fernández de Oviedo makes is to confirm that, apart from what he had heard from certain travellers, Anghiera had eaten this fruit, "called *musas*", in Alexandria, and it was clear that it was very different from *Platanus*. This author, besides, did not feel very attracted by the plant since, as he said, it "grows so much" that it renders the land useless for other crops (Torres-Asensio, 1892, IV: 207-208) more typical of Western European agriculture.

Fernández de Oviedo believed, on the contrary, that the *Musaceae*'s capacity to reproduce was one of its advantages. For this reason he confessed to own at least *cuatro mil pies de ellos* in his own farm,

> [...] and they have been moved to Tierra Firme and where they have been planted they have grown very well: *y no hay hombre de cuantos en esta tierra tenemos heredades en el campo que esté sin muchos de ellos. Bien creo que hay en mi hacienda iiij [cuatro] mil pies de ellos, y en otras muchas haciendas que hay, mayores que la mía, hay muchos más*, because they are very advantageous and the many there are of them are used by folk, and it is even a good income for their owners, for any expense is put into growing them (Fernández de Oviedo, 1535: LXXX; Fernández de Oviedo, 1547: id.).

The peculiar thing of this revealing passage, for it shows that our chronicler grew bananas on his farm and that he had direct knowledge of the plant, is that it does not appear in the editions of 1851 and 1959, to which scholars usually refer. The equivalent paragraph reads:

> [...] and they have been moved to Mainland and where they have been planted they have grown very well; and in the heredities which neighbours have on the island, there are countless numbers of these bananas, because they are very advantageous and they are used, the many there are of them, by folk, and it is even a very good income for their owners, for any expense is put into growing them (Fernández de Oviedo, 1851, I: 292; Fernández de Oviedo, 1959, I: 248).

It may be thought that, definitively, the author himself decided to delete that little paragraph; but other alternatives should not be dismissed, such as the loss of part of the material or the use (in 1851 and 1959) of defective copies of the original manuscript. Cuesta-Domingo had pointed out that Fernández de Oviedo "had lived for a quarter of a century" in America and, for that reason, his experiences and the information obtained allowed him to write a "great work in which the physical and human geography are combined" (Cuesta-Domingo, 2007: 118), despite its imperfections.

The second of the mentioned books is the *Itinerary* by the Bolognese Lodovico di Varthema (c. 1470-1517), who indeed had referred to the *plantain-tree* under the name of *malapolanda*, corruption, as it seems, of the Tamil *valei pullum*. Perhaps the most interesting thing is that this Italian traveller described three species: "The third sort are bitter. The two kinds above mentioned are good like our figs, but superior" (Badger, 1863: 162-163). Fernández de Oviedo, who mistakenly writes Ludovico de Vartenia [sic], an error that has endured throughout centuries (1851, I: 292, 1959, I: 249), points out that in Santo Domingo [Hispaniola], the plant also showed differences in the quality of the fruit, which could be an indication of the existence of species or perhaps different hybrids,

> And I also say that on this island this fruit is not all of a goodness, because there are some better fruits of these and tastier than others of the same fruit; but this may happen because of the soil or the disposition of the land as it happens with all other fruits in Spain and elsewhere (Fernández de Oviedo, 1535: LXXX).

It is possible, on the other hand, that he had first seen the plant in Las Palmas in 1520, for he was a long time linked to his destinations in Mainland, involved in political and administrative conflicts and travelling quite frequently between America and Spain. Simply, he knew that they had been moved to Santo Domingo in 1516 and, when he wrote his chronicle, he confessed he had seen them during a layover made in the Canaries. At the same time, he discovered that they held great attraction for ants,

> Ants are very keen on these bananas, and it is always seen on bananas great masses of them [...]; and in some parts there have been so many ants that [...] they have uprooted many of these bananas and thrown them out of the villages (Fernández de Oviedo, 1526: XLIIJ).

This is not a simple anecdote, which furthermore he repeats in all his works. Bartolomé de Las Casas, in Chapter CXXVIII of the Book III of his *History of the Indies*, talked, in almost marvellous terms, about the dreadful epidemic of ants that invaded, among other places, the city of Santo Domingo "for this time of year 18 and 19". This new biblical plague destroyed several vegetable gardens, and among them "one of the monastery of the Dominicans, a principal one with pomegranates and orange trees", and in the Vega, another famous vegetable garden of the Franciscans. At the end of the chapter Las Casas writes:

> The cause that originated this anthill, some said and believed, was the brought and position of the bananas (Casas, 1876, V: 27; Casas, 1956, III: 472).

VII. Friar Tomás De Berlanga

The move by Friar Tomás de Berlanga, from Gran Canaria to Santo Domingo, not of a single and stunted specimen of *Musaceae*, but probably of several taxa or hybrids of the plant, around 1516, is credible, despite the fact that up to now no evidence has been found documenting his trip to America in this particular year.

The possibility that this move had taken place after 1526 is dismissed because of the publication, on the same date, of the said *Summary* [*Oviedo de la natural hystoria de las Indias*], where the writer already describes the importance of bananas in Hispaniola. There is, however, documentary evidence of Berlanga's first trip to the New World, as part of a group of Dominicans who set out from Seville "in mid-November 1510" for a voyage of "about a month and a half". New expeditions were chartered in 1515 (Figueras-Vallés, 2010: 48, 76, 85-89; Rubio y Moreno, c. 1930: 301, 330).

In 1517 Friar Tomás de Berlanga sent Friar Bartolomé de Las Casas "to the Peninsula in order to recruit peasants who wanted to go to the Indias [West Indies] to settle". Among the two hundred farmers who accepted the proposal there were seventy neighbours of Berlanga, since Friar Tomás had insisted that Las Casas had to go to his hometown "and not elsewhere" because, as Figueres-Vallés has pointed out,

> he knew his people would do an excellent job in the Indias, as did a fellow countryman of him, who was in Hispaniola, the bachelor surgeon Vellosa [or Velosa], who developed a system for whitening much better the sugar cane (Figueres-Vallés, 2010: 86-87).

Everyone had had "their eyes closed", wrote Fernández de Oviedo, until the "bachelor Gonzalo de Velosa, at his own expense of great and excessive spending", brought sugar masters to this island "and made a *trapiche* [rustic sugar mill] with horses and he was the first who succeeded in making sugar on this island". However, he clarified that, since some time ago, they had taken the first sugarcanes to Hispaniola, and also molasses had been produced; but it is obvious that Velosa had been characterised by a higher professional thoroughness. For this reason he had built a *trapiche* drawn by an animal on the banks of the Nigua River and, very soon, as we will immediately say, associated with Cristóbal and Francisco de Tapia brothers. "He brought the officers to do so from the islands of Canaria (Canary Islands), and ground and made sugar before anyone made it" (Fernández de Oviedo, 1535: XLII *v*; Fernández de Oviedo, 1851, I: 118).

Fernández de Oviedo was probably informed about the move of bananas to Santo Domingo, led by Friar Tomás de Berlanga, by the bachelor of Gonzalo de Velosa or, where appropriate, by someone from his old surrounding such as, for example, Cristóbal and Francisco de Tapia brothers. We know that the latter had been governor of the fortress of Santo Domingo, a position in which he was replaced in 1533 by Fernández de Oviedo himself (Pérez de Tudela, 1959, I: CXIX-CXX), so he put on recorded his new employment in the colophon of his *History* (1535): "governor of the fortress and castle of the city of Santo Domingo in Española island".

Thus, Fernández de Oviedo, given the quality and closeness of his informants, had not the slightest doubt when it comes to include the fact in his *History* as an indubitable truth, despite his corrector obsession of the advanced age. Velosa had invested heavily in the incipient sugar sector, and therefore he moved the technicians, tools, slaves and, naturally, some of the Canary Islands-African food traditions that, thereafter, would mark with an indelible stamp the cultural and food and agriculture history of the New World.

VIII. Investing in Hispaniola

In 1515-1516 occurred in Santo Domingo and indeed, in the Americas, a very special coincidence. The start-up of the first *ingenio* [sugar mill] worthy of such name came to coincide, technically, with the arrival of bananas in Hispaniola. The date of the inauguration of Velosa's *trapiche* is in Father Las Casas (chap. CXXXIX):

> Later, a neighbour of the city of Santo Domingo came to understand how to do it [sugar]; he was called bachelor Vellosa because he was surgeon, native of the town of Berlanga, about the year of 516; he was the first who made sugar in that city, after making some more suitable instruments, and thus it was better and whiter than the first of the Vega, and the first was that from which he made *alfeñique* [cooked sugar-paste] and I saw it [...] he managed to make one that is called *trapiche*, which is a mill or *ingenio* [sugar mill] that is drawn by horses (Casas, 1876, V: 28; Casas, 1956, III: 473).

Velosa was appointed surgeon of the city in 1511; but "between 1514 or 1515 the salary stopped to be paid to the physicist, apparently because he used the office negligently" (Mira-Caballos, 2010: 512), which, at first, would contradict his entrepreneurship; but the change in his financial stability may induced him to invest their savings in the *trapiche*. It was, in any case, an important investment with a high initial cost to make it profitable: sufficient sugarcane plantations, technology, workforce, commercial organisation to output products, etc. As Pérez-Vidal suggested "that development is not reached, apparently, in Hispaniola until 1515", since until that moment "sugar could only be obtained in small quantities and with inappropriate means" (Pérez-Vidal, 1983, II: 309; Phillips, 1985: 196).

However, the overlap of the two dates, that of the arrival of the banana and the one of the start of the not handmade production of sugar, is surprising even in its imprecision. As Ortiz stressed in his brief chronological proposal: "1515 (or earlier): The first sugar harvest of the first rustic sugar mill. By *Gonzalo de Velosa*", and next, "1516: The introduction of the first *ingenio* (sugar mill). By *Gonzalo de Velosa* and *Francisco and Cristóbal Tapia* brothers" (Ortiz, 1987: 295).

Basically, it is a logical coincidence within the frame of reference of a temporal sequence that should be placed in the mid-1510s, when the enhancement of the Caribbean led to the New World resources that had already been experimented in the Mediterranean and, above all, in the Atlantic archipelagos of *Macaronesia*, where it is introduced the novelty of slave labour in the plantation (Viña-Brito, 2006b: 22-23). It is a phenomenon that is repeated: settlers, landowners, traders, slaves and industrial technicians, and also certain patterns of sugar technical and cultural tradition. The first initiative for the sugar exploitation, although using rudimentary methods, was that of the Catalan Miguel Ballester, though the first who cultivated the cane was Pedro de Atienza (Ortiz, 1987: 295-296; Pérez-Vidal, 1983, II: 305, 311; Cuevas, 1999: 7; Cantero *et al*., 2005: 112).

There was a transatlantic network between the archipelagos of *Macaronesia* and the Caribbean, which of course also includes Brazil in competition for new technological developments (Sánchez-Valerón & Martín-Santiago, 2003: 72, 88-89; Daniels & Daniels, 1988: 494, 496, 510). This historical reality was highlighted, already since 1773, by Viera y Clavijo:

> Our Islands were not secretive of their excellent *sweet canes*, or of the manner of making sugar in their *Ingenios*, since sugarcanes, ingenios, trapiches and officials, all came to America from the Canaries. What a colony so useful for that continent! (Viera y Clavijo, 1773, II: 476-477; Viera y Clavijo, 1951, II-III: 250).

The investment required to start an *ingenio* of those called "powerful" was not less than ten or twelve thousand gold ducats in order to have it "run-of-the-mill". The figure, undoubtedly raised, should not be surprising because it was needed to have,

> At least, continuously, eighty or one hundred blacks and even one hundred and twenty and some more, in order to have better all they need; and near a good herd or two of cows of one thousand or two thousand or three thousand of them, *que coma el ingenio* [which eat the *ingenio*]; apart from the great expense of officers and masters who make the sugar, and of carts to carry the cane to the mill and to bring wood, and people who continually cultivate the wheat and take care of and water the canes, and other necessary and of constant expense things (Fernández de Oviedo, 1535: XLIIJ; Fernández de Oviedo, 1547: id.; Fernández de Oviedo, 1851, I: 119).

The growing decrease in indigenous population, along with the decline in gold production, turned the sugarcane into the last hope of salvation; at the same time black slaves were the "indispensable means of production" in the change of the production model. Various subterfuges were resorted to, such as the demand that slaves who travelled to America had to be Christianized, which strategically could benefit the Canaries' intervention as a previous layover in the process of slave trade. But in the end, the interests of individuals triumphed and especially those of the Crown because, as the academic Joaquín Maldonado-Macanaz wrote,

> More certain is that the Catholic King Fernando had *situados* 500,000 gold escudos per year on the income of the Island, which came not only from the working of the mines, but also from the sugar industry transplanted there from the Canaries by Gonzalo Velosa, who founded the first *ingenio*, as well as from other sectors of agriculture to which Spanish population was dedicated (Maldonado-Macanaz, 1870: 9).

From 1518, by virtue of the *asiento* [slaving monopoly] or royal privilege that was granted by Charles V to Laurent de Gouvenot, Governor of Breza, it was intended to introduce in America some 4,000 blacks in the course of eight years (Ngou-Mve, 1994: 40; Friedman, 2000: 49; Phillips, 1985: 185) in order to guarantee the workforce in a plantation economy that was beginning to be efficient.

The situation had actually changed from 1516, with the arrival in Spain of Carlos V. The new governor of Santo Domingo, Rodrigo de Figueroa, had the support of the Crown for the promotion of sugar production, and as Phillips indicates, "the king also encouraged sending experts from the Canaries to the Caribbean, exempted technological equipment from taxation, and allowed on-the-spot production of the copper", necessary for manufacturing works of sugar. "Progress was rapid" (Phillips, 1985: 197).

In short, around 1516 all the factors were given for *Musaceae* to pass to America, as a traditional food of Africans that had also a great identity value. Benítez-Rojo and other authors have stressed that, along with various products of vegetal origin, banana "was an essential element of the African diet, so much so that in many places in the Caribbean it is still called *guineo*, that is, native to Guinea" (Benítez-Rojo, 1996: 96-97; Vesa-Figueras, 2003: 75). Yam constituted, in turn, a staple food in tropical areas of Africa such as, for example, Benin (Fernández-Armesto, 2002: 211).

It was also pointed out that, "as with sugar, the history of the banana plant in Spain's New World colonies begins at the gateway of the Canary Islands".

The problem that arises is to know the type of *Musaceae* officially moved to the Americas, since "the European palate's attraction to the sweet banana would imply that Berlanga's clone was in fact the fruit type", which Fernández de Oviedo neither helps clarify (Carney & Rosomoff, 2009: 40, 113, 114). As Lassoudière suggests: "Des doutes subsistent sur les espèces : s'agit-il seulement de bananiers dessert? De bananiers plantains? Des deux?" (Lassoudière, 2010: 117).

IX. In the Footsteps of the Chosen Species

Was it a single biotype or were they several? It has been noted that, probably, it would be cultivars "Silk fig" or "French plantain", which are not "edible in raw, but after cooking" (Galán-Saúco & Cabrera, 1992: 4; Robinson & Galán-Saúco, 2011: 2-3). In the Caribbean, it was seen that the old term *Musa sapientum* would correspond to the hybrid "Silk fig" in Trinidad; to the "Figue pomme" in Haiti, Guadeloupe and Martinique; and to the "Cambur manzano" in Venezuela. The term *M. paradisiaca* would refer to the "French plantain" or *Dominico* of Venezuela (Cheesman, 1948: 293-296; Cheesman, 1950: 29-31; Haddad & Borges, 1971: 227-228).

García-Álvarez suggests that different varieties were introduced at different times and from different territories, which would give rise to names associated "with the geographical origin of the clones", and hence the "generic name *guineo* used in Eastern Cuba for banana" (García-Álvarez, 2001: 150). This is interesting, since bananas were grown in Santiago de Cuba around 1538, when it was described by "hum fidalgo Delvas" who accompanied Hernando de Soto, before moving to Florida. "Chamam se naquella terra *Plantanos* [sic], e sam de bom sabor e amaduram depois de colhidos", and he also highlighted the *batatas*, which "mantem muita gente, e principalmente os escrauos" (Burgos, 1557: XI *v*, XII; Costa de Macedo, 1844, I: 11-12).

The added *guineo* is therefore a form of cultural identification and, of course, a reference to the African origin of the plant, which had already been pointed out by Anghiera:

> *Ab ea Aethyopiae parte, quam vulgo Guinea dicitur, vbi est familiaris & sua sponte nascitur, primum aduentam ferunt* (Anghiera, 1530: C v).
>
> It is told that they first took it from that part of Ethiopia which is commonly said Guinea, where it is common and grows spontaneously (Torres-Asensio, 1892, IV: 208).

Acosta distinguished at least two types of bananas or *plantains*; some small, delicate and white, which in Hispaniola are called *dominicos*, and others "thicker and tough and red". He also stated that it was the most commonly used "fruit" in the Indies, "although it is said that its origin was Ethiopia and that from there came, and in fact blacks use it a lot" (Acosta, 1590: 247, 250).

The Inca Garcilaso de la Vega maintained that the *dominicos*, smaller but more rarer and tastier, received this name because the skin, when the fruit was ripe, "was black and white with patches" (Garcilaso de la Vega, 1609: 211; Garcilaso de la Vega, 1723: 282), imitating therefore the habit of the Dominican friars.

In the New Kingdom of Granada, Friar Pedro Simón takes the tradition that states that the *plantains* or bananas had been brought to America by "the Spanish from the Canaries", and maintained that they were of "good taste when raw if they are well seasoned; and they are also cooked". He also said that he had seen bunches of those that are "called of Guinea" with more than three hundred fruits, "though small" (Simón, 1626: 725).

The *Historical Relation* by Jorge Juan and Antonio de Ulloa talks about dominico and guineo bananas (Juan & Ulloa, 1748, I (2): 391); and in 1769 the botanist Gómez de Ortega distinguished, in a note to the voice "bananas" of the book by Commodore Byron *A Voyage Round the World*, the three species of *Musaceae* that were best known in his time. The big ones (bananas), the small ones (plantains guineos) and the medium ones (dominicos); "to the second species it is likely that its name come from Guinea, where it is produced a special abundance of them" (Byron, 1769: 11-12).

In his *Saggio di Storia Americana* the Jesuit Filippo Salvadore Gilij (1721-1789), who developed his missionary work in the Middle Orinoco, also drew attention to the varieties *guinèo* or *cambùre*, *artòni* and *dominico*, of which he says that "ed è un frutto di mezzo tra l'Artòne, e 'l Guinèo se non che il Dominico è di figura quasi triangolare" (Gilij, 1780, I: 212, 310-311).

Humboldt, who described fascinated the Valley of La Orotava (Tenerife), "the greatest sight, the richest of the universe", mentioned groups of bananas being part of such an idyllic landscape (Puig-Samper & Rebok, 2007: 289). In New Spain, when he defended his thesis on the existence of a type of pre-Columbian *Musa*, as had defended the Inca Garcilaso de la Vega, he suggested that Friar Tomás de Berlanga "could not transport from the Canary Islands to St. Domingo any other species but the one which is there cultivated, the *camburi*", and not "the *plátano [h]artón* or *zapalote* of the Mexicans". The first of these species, wrote, "only grows in temperate climates, in the Canary Islands, at Tunis, Algiers, and the coast of Malaga". He also stated that "the *guineo*, a variety of the camburi, as its name proves, came from the coast of Africa" (Humboldt, 1822a. II: 369, 371; Humboldt, 1822b, II: 233-234).

The fact is that while "in Peninsular Spain both plantains and bananas were called *plátano*", in Spanish America "sweet fruit banana was linguistically

differentiated from the plantain (*plátano*) as *plátano guineo*" o *guineo* (Carney & Rosomoff, 2009: 103).

One possible explanation is that this linguistic phenomenon occurs for two principal reasons. In peninsular Spain crops of bananas, from the fall of Granada, were further reduced to marginal areas, and the fruit became, already from the sixteenth century, a courtly delicacy.

In the Canary Islands, with more suitable temperatures, *Musaceae* survived as I already said, but also marginally because of the change in the production model to vine and wine exports (seventeenth and eigthteenth centuries). Despite everything, lexical coincidences have been detected in the traditional glossary of the banana between the two shores of the Atlantic, and it has been suggested that, already since the sixteenth century, the plant was known in the Canaries as *plátano guineo*. "In this way the banana as well as sugarcane, yam and maybe the vine were known in America from the Canaries" (Leal-Cruz, 1996: 209-210). But surely it was called *plátano de Guinea* in the Canaries and it was in America where it was known later as *guineo*, because slavery, the culture of black Africa and also the biodiversity of the *Musaceae* carried much more weight there.

Thus, in the Americas, the lexical richness would be related to the process of introducing the plant, to the species and territories diversity (from Florida to Ecuador), and especially to the weight that in some of these countries had slavery, cultural resistance and miscegenation. The *guineo* is a culturally mestizo hybrid vegetable.

X. "Come Out the Guineo to Dance" [Calderón De La Barca]

Hermann Schacht (1814-1864), who visited Madeira and the Canary Islands in the mid-1850s, detected among others, species of *Musa sapientum*, *M. paradisiaca* and *M. Cavendishi*. He assured that they thrived in low areas; that they rarely grew to 600-700 feet; that in Tenerife they spread everywhere and formed "large plantations"; he offered some interesting data on the size of the *cepa* or trunk, on the type of cluster, on the bloom, etc. "The fruit of *M. sapientum* has the shape of a cylinder, elongated and flattened at both ends", when it is ripe it "has yellow colour with black spots that also appear on the trunk of the plant". The fruits of *M. paradisiaca* and *M. Cavendishi*, which are smaller, "are not cylindrical as the previous ones, but angular, and some people will prefer these ones". They could be eaten ripe or well roasted and cooked "as a vegetable". The *M. sapientum*, which was the one that had a higher stem (ten to twelve feet), opened its large leaves out on either side of a central rib, "and it soon splits due to the action of the wind" (Sarmiento-Pérez *et al*., 2012: 94-98).

It is striking that, in addition to food uses, Fernández de Oviedo also emphasised, from the *Summary* of 1526, morphological aspects that Schacht repeats accurately, for example, size and appearance of the leaves after the action of the wind; clusters with forty and fifty fruits more or less, which measure "a hand and a half", and are the bulk of the "wrist of an arm" (Fernández de Oviedo, 1526: XLIII *v*-XLIII). Without forgetting the differences in the quality of the fruits, which the chronicler attributed to the fertility of the soil.

In Cuba, the term *guineo*, alone or accompanied by the voice plátano, was clearly identified with a particular species of *Musaceae*, which according to Pichardo would be *M. sapientum*:

The GUINEO (*Musa sapientum*) is the smallest of all; its length does not exceed one-third of a foot, straight, cylindrical; when mature softest flesh (Pichardo, 1836: 212-213).

In later editions he insisted on that the "*plátano guineo* or *de Guinea* (*M. sapientum*)" was the smallest of them, although "near the bulk of the *macho*" [*M. paradisiaca*], and described it in similar terms. He added that its clusters were laden with excess of fruits, and that the vegetable could not be from the Caribbean region, since even the *dominico* or *hembrita*, or *Congo*, a variety, he states, of *M. regia* (small, delicately curved, soft and delicate when ripe), was from Nigricia [Negroland], as well as the *guineo*, while those of the *Otahití* and of *Orinoco* clearly expressed their origin. How could Columbus and the others talk about *ñame*, *yuca*, etc., and mute the interesting plátano?, he asks himself (Pichardo, 1849: 187; Pichardo, 1861: 213-214).

Thus, when a certain species of bananas left the Canaries in 1516 it is possible that it already bore the appellation *plátano* or *plántano de Guinea*, and that, with the passage time, it would be transformed, especially in the Caribbean islands (Santo Domingo and Cuba), into *plátano* or *plántano guineo*, since in both cases meant the same: bananas coming from the Gulf of Guinea, the banana of the black slaves. Indeed, from 1510 it becomes "legal the sending of black Guineans" to the Caribbean (Viña-Brito, 2006b: 21-22).

In the Canary Islands there has always been the *yerba* [grass] from Guinea [*Panicum maximum*], as well as in Cuba where, in addition, there is the "guinea fowl"; but Canary Islanders have also the "guinea pumpkin", long, curved and of very yellow flesh, perhaps like those grown in the nascent town of *Ingenio* (Gran Canaria), from the sixteenth century (Sánchez-Valerón & Martín-Santiago, 2003: 432; Morera, 2006: 642-643; Corrales & Corbella, 2009, I: 1074-1075).

Also, the *guineo* is a dance similar to the primitive *canario* (ancient dance that apparently came from the natives of the Canaries), and which came into fashion in Europe during the Modern Age. That is why the footman Rodrigo says, in act II of *The Ingratitude*

Revenged by Lope de Vega: "and I can dance the canarie, / I'm a native of there, / and among sugar brought up", and therefore Sandoval writes, talking about black *guineos*,

> Among them there are many good musicians, to such a degree that from them people learned in Spain [...], the so celebrated dance, called the Canario, reformed Guineo by the Isleños Canarios (Sandoval, 1647: 45).

For this same reason, Mr. Pedro Calderón de la Barca (1600-1681) makes the king say, at the end of his burlesque comedy *Cephalus and Procris*, "The giant with the owners / come out the guineo to dance" (Calderón de la Barca, 1691: 416).

Fernando Ortiz already highlighted the need to give the corresponding gentilic name to certain nouns, with which they become dense signs of identity. Blacks and "then whites", he says, used in America the African names to "distinguish certain things from other similar things, according to their origins". Thus, it is said *fowl of Guinea*, *yerba of Guinea*, *plátano guineo*, *plátano burro* (which is *mature* in carabalí [Calabar]), *jutía arará*, etc." (Ortiz, 1987: 370).

In the general Spanish, the expression *guineo* soon became to identify slaves. Covarrubias defines *guineo*, in first meaning as a black of Guinea, and in second as "certain dance of prestos [rapid] and hasty movements". Guinea was "the land of the blacks" (Covarrubias, 1611: 457 *v*). Therefore, *guineo* meant black, and black was equivalent to slave. Sandoval says that such "Ethiopian guineos" were the most beloved of the Spanish. "These guineos are", he states, the most esteemed, sought-after and expensive blacks, "and those we commonly call honest, good-natured, with sharp wit, beautiful and willing, joyful of heart" (Sandoval, 1627: 41 *v*; Sandoval, 1647: 45).

Cervantes, in his comedy *La Entretenida* (*Jornada* I, 606-612), introduces Ocaña, a footman who complained about being treated like a *guineo*:

> ¿Yo no veo
> Que, cual si fuera guineo,
> Bezudo y bozal esclavo,
> Apenas entro en la sala
> Por alguna niñería,
> Cuando cualquiera me envía,
> Si no en buena, en hora mala?

It should not be very difficult to identify certain types of *Musaceae* with the name *guineo* or *plátano de Guinea* because, in fact, they were the favorite of the slaves, they were nutritious, versatile and intensely familiar and, therefore, with a powerful identity value. Viera y Clavijo, unlike other authors, equated the smaller bananas with those called *dominicos*,

> In our islands that species is preferred with good reason, which gives the smallest bananas, called *dominicos*, because of its delicate, soft and creamy of all its flesh, and which Linnaeus distinguished by the name of *Musa sapientum*, considered without doubt the daily bread of the philosophers of India (Viera y Clavijo, 1869, II: 203).

Although he tells bellow, once again, Berlanga's expedition in 1516 as well as the vision of Fernández de Oviedo in the Franciscan monastery of Las Palmas, four years later, he does not say that that was, specifically, the chosen species, perhaps because as a good naturalist he sensed that from the beginning of the history there had lived together in the island territory *Musaceae* taxa which, brought from Guinea and Andalusia, grew in monasteries' vegetable gardens, real spaces of culture of the oasis, before moving to the New World. After all, as Benítez-Padilla (1959: 147) wrote, "the function of the island is that of the oasis in the open field of the oceanic desert. It is nourished by caravans, at the same time it nourishes them".

In the fourteenth and fifteenth centuries when Portuguese navigators explored the most remote coasts of West Africa, "somatic mutations obviously occurred, resulting in a large number of clones and a secondary centre of diversity in Africa" (Robinson & Galán-Saúco, 2011: 2).

XI. Conclusion

In 1483, almost a decade before the discovery of America, the first efforts were being made to make the fertile virgin lands of Gran Canaria profitable. During the following decade of 1490, the islands of La Palma and Tenerife joined the Crown of Castile and were also incorporated in an intense production phase. The three islands were, along with Madeira and Santo Tomé, well equipped to start the first draft of Atlantic model of sugar plantation.

Why should we limit ourselves to think it was only one biotype which was moved, from the Gulf of Guinea to the Canary Islands, to feed the emerging endowments of slaves, and which then moved from the Canaries to Hispaniola? Perhaps it should be suggested the possibility of the reception, in the Canaries, of clones from Guinea, Cape Verde and other parts of Africa, as well as from Andalusia, the latter brought to the Canaries by Franciscan or Dominican missionaries, as a result of the conquest of Gran Canaria, La Palma and Tenerife, the richest in water and the most populated by indigenous (*canarios*, *benahoaritas* and *guanches*), who were also enslaved as, in fact, happened in America.

When the possibility of obtaining sufficient gold resources were exhausted in the Antilles, and the system diverted towards a model of sugar plantation, the islands of Macaronesia were put at the service of the new centers of demand for goods, equipment and services. Thus, technicians, slaves, and traditional food and resources were moved. The gentilic name served to

differentiate plants, animals and humans. Under the pain of an extraordinary historical birth, these people were building new worlds, new spaces of effort, sacrifice and intense cultural diversity.

Nobody called the cane (*Saccharum officinarum*), cane of the East, of Sicily, of Spain, of Madeira or of the Canaries, though of course there are different varieties, since it was always known as sweet cane or sugarcane; white, unique and shining as a Roman goddess. The plantain and the banana needed a gentilic name to be recognised and differentiated, since, depending on the circumstances, they became viand (cooking banana) or smiling fruit, but its clusters are always bended towards the ground as if they recognise their humble origins.

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