AJI AND BATATA AS GROUP - NAMES WITHIN THE SPECIES IPOMOEA BATATAS

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THE DETAILED LOG WHICH COLUMBUS KEPT on his first crossing of the Atlantic was a precious document, and the extensive précis that Las Casas preserved is but a poor compensation for its disappearance. Conjecturally the précis was made about 1530; for Las Casas had need of it from the times when he commenced to write his history of the Spanish conquest of the Indies — that was in 1527 — and he had an opportunity of access to it in the original when he was in Spain in 1530. Columbus' son, Fernando, testified in his "Life" of his father to its detail. Navarrete printed the précis in the first volume of his *Colección de los Viajes* (1825).

The précis contains references to the sweet potato (Ipomoea batatas L.) which, taken in series show, subject to the reservation that Las Casas did not omit others, the stages by which Columbus came by his first knowledge of this great esculent of the New World. Columbus' first sight of it was on the coast of Cuba; and he wrote on November 4. 1492, that the fields there held an abundance of vams resembling carrots, possessing the taste of chestnuts (tienen llenas de niames que son como zanahorias que tienen sabor de castañas). From various other references this comparison to a carrot is to be interpreted as a references to its shape and not to its colour. The yam, niame, was the tuber of the sweet potato, as Las Casas marginally indicated by the words "los ajes o batatas son estes". The reader will note that he couples the words ajes and batatas by the word "or", ajes o batatas. I showed in a paper published in the Proceedings of the Linnean Society of London (session 150, p. 84) that the word "niame" which Columbus used, indicated at this date quite legitimately several starchy tubers

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of extra-European origin, but of no real botanical affinities, for which Europe, having no names, had borrowed a name from the Guinea coast of Africa. Columbus was quite justified in applying it to the sweet potato as a nameless exotic starchy tuber; in brief he classified it.

Columbus enslaved certain Indians encountered at Watling Island in the Bahamas with the intention of compelling them to learn Spanish and to serve as interpreters. From Watling island a southward course over about 240 miles of sea took him in three weeks to Cuba, near its eastern end, and a slightly shorter course to the eastward brought him to the northern side of Hispaniola where he established himself (December 6, 1492) a little to the west of Cap Haitien, and then as the captives had had nearly two months of contact with the Spaniards and as he had had the good fortune to lay hands on men able to make themselves understood in Hispaniola, he made a good contact. In a letter of a later date to the royal treasurer at the Spanish Court he wrote appreciatively of the captives that "when they had learned their words they were of great advantage" (tum verbis intellexerunt magnoque nobis fuere emolumento). An amanuensis had written the letter for Columbus' Latin would not have sustained it; but the opinion was Columbus' anyway. The same "yams" that had been seen in Cuba were here again seen on the ground and Columbus using his captives entered in his log under the date of December 21, 1492 that the yams were called "aji" and were good and plentiful: An English writer might perhaps have written the sound of the word as ahhee.

As soon as Columbus had made his settlement and had arranged for a sufficient number of men to remain in it, an easy matter for numbers volunteered, he sailed for Spain and in 48 days he made Lisbon whence he proceeded to Palos and from Palos through the Straits of Gibraltar to Barcelona to report to the king and to the court, which happened to be there. His ship, the *Niña*, had had the company of the *Pinta*, under the command of Vicente Yánez Pinzón, on leaving Hispaniola but an Atlantic gale had separated the two. Yánez Pinzón, driven northward, made Bayona some two hundred miles away. It may be assumed that both ships started the voyage abundantly provided with sweet potato tubers as these were, in Columbus' words, good and plentiful. That Yánez Pinzón had any sound tubers to put ashore at Bayona or that Columbus at fifty one days from sailing had any for his home port of Palos where the chances of establishment in gardens would have been good, is unsupported by records.

At Barcelona a triumphal procession was staged. There were two onlookers whom I shall quote for what they record regarding the sweet potato. Peter Martyr and Gonzalo Hernández Oviedo y Valdez; but neither of them left his impression of the procession; it is another, Francisco López de Gomara to whom one has to turn for a description of it. Peter Martyr was an erudite Italian who held the post at court of officer in charge of the boy pages, a post that brought him in contact with whomsoever he pleased. It put him in charge of Columbus' two sons when Queen Isabel by a remarkably kind act caused them to be named as pages to her son Juan, and after Juan's early death to herself. Peter Martyr had the means of learning as much about the New World as was possible without going there; and what he learned and thought interesting enough he embodied in letters to influential people, forty of which he published, ten at a time, in the years 1511, 1516 (two decades) and 1521. Ultimately he was placed on the Council for the Indies. Oviedo was a boy page under Peter Martyr at the time of the procession. In 1513 Oviedo entered on a colonial career with the appointment of supervisor of smelting of gold on the American mainland; next he distinguished himself as a soldier in Darién and was rewarded by the govenorship of Cartagena and its islands; later he became the chief magistrate at Santo Domingo (founded in 1498 to become the capital of Hispaniola) and finally keeper of the records there. In all he had thirty four years of service broken only by short repatriations. He was a man of judgement and experience.

López de Gomara was a priest in the home of the redoubtable Cortés, and his apologist. He had experience of life in the Spanish Indies, but not extensive, and had returned to Spain before writing, in his *Hispania Victrix*, fifty five years after the event the description of Columbus' procession. He had not been a witness to it. This is from his record. Indians in war paint led it; of them Columbus held seven (not ten as López states). Behind the Indians were carried parrots such as the Indians delighted to tame; López says that of them there were forty; then were carried stuffed animals of various kinds and an exhibit of fruits, ornaments of gold, etc. In the language of the day the word fruits covered various produce including tubers and therefore the sweet potato. López states that there were "many turkeys and Guinea pigs and *batata* and *ajis* as well as Indian corn".

The likelihood of the exhibiting of "aji" is great: but one questions López' faithfulness to the event in regard to "batatas", wishing at the same time that it were not questionable, for if it were not then the statement that there were many exhibited had been better supported. López was not a writer of unimpeachable accuracy; for instance Sir Arthur Helps found him inaccurate in his acount of Las Casas' efforts to plant a colony on the coast of Venezuela.

Now Columbus was zealous in his endeavour to introduce new plants into Spain. In an early letter he claimed that he had brought Indian corn, which he certainly did, and remarked on the success with it. Not only did he bring back American exhibits on his first return, but apparently on every return, and he sent such things by the hand of others. His zeal would cause him to plan to succeed and he must have arrived at Barcelona prepared to exhibit sweet potato tubers which he had set aside and cared for during transit; and he scarcely would have exhibited them in decay. The reader will consent that Columbus must have had sound tubers of *aji* at Barcelona and that his ship might even have left some behind in Palos; but there is no evidence that he had *batatas* to show save in López' work.

No sooner had Columbus reported his discovery of the New World and the leaving of a settlement on the island of Hispaniola than preparations were made in Spain for an expedition on a scale of conquest. Seventeen ships were fitted out to carry 1500 men. There went with them twelve ecclesiatics for the comfort of the troops and the conversion of the Indians. One of the ecclesiastics was a Hieronymite brother named Román Pane. There were surgeons among them also, as a volunteer was Diego Alvarez Chanca, already a man of repute in his calling. Both of these men left information regarding the sweet potato.

The armada proceeded to the Canary Islands and, passing through them, took on board domestic animals etc. at Gomara. They then sailed westward on a course that took them to Dominica in the Lesser Antilles; and from Dominica the ships worked their way west and then northwest to Hispaniola. The experience of contacts made by touching at islands on the way taught Columbus that Carib raiding came from the south, so the Arawak inhabitants were the more exposed to it the further they lived from Hispaniola.

The ferocity of the Caribs left to him nothing but combat with them; but the peaceful Arawaks were approachable and would even give themselves into slavery if that protected them from the Caribs. It is interesting to recall a remark regarding them which Hawkins entered into the account of his second voyage in 1564, "surely gentle and tractable... or else had it been unpossible for the Spaniards to have conquered them as they did".

So Columbus proceeded to Hispaniola, there to find his settlement newly destroyed, not in consequence of a failure of that Arawak character; but of the devilishness of his settlers. He immediately established a new settlement on the site, but on the same coast, the site being to the eastward and near the cape which he named Cabo Isabela. There he unloaded the domestic animals that he had brought, sowed experimentally his wheat and his barley, planted grape vines and sugar cane, and having done this sent several ships back to Spain under the command of Antonio de Torres to procure and bring additional stores. These ships sailed from Hispaniola on February 2, 1494, and made Cádiz in sixty six days. It is unbelievable that they were not provisioned liberally at sailing with sweet potatoes and the port that they made was very suitable to receive and grow them; but the duration of the voyage was rather great for their keeping.

Chanca sent by Torres a straight-forward account of the

events of the voyage, of the disaster that had overtaken the first settlement and of the founding of the second settlement. Román Pane set himself to study the Ciquayen dialect spoken in the interior where the Spaniards had built a fort and were seeking gold. When he had sufficient knowledge, Columbus asked him for information on the religious beliefs of the Indians: The report that he made has been preserved for us by Fernando Columbus in his "Life" of his father. In it Román Pane describes aji, spelling the word 'age', as a tuber of the Indians, sometimes with the appearance of a radish, that is to say of the large white winter radish of Spain, and sometimes with the appearance of a turnip. Chanca likewise compared it to a turnip. Indian men and women, Chanca said, came to the Spaniards laden with 'ages' (for he too used this spelling) which are like turnips, very excellent for food (ages que son como nabos muy excelente manjar); and he indicates how very acceptable the vegetable was on the Spaniards' tables. Then he continues "this age the Caribs call nabi and the Indians hage". Nabi is correctly attributed; a variant is mabi and it is rather wide-spread, with an extension from the sweet potato to some other tubers.

Names resembling one another fall rather thickly in Chanca's lines. One and the same line holds age and hage (a este age llaman... los indios hage). In another line he names Capsicum as 'agi' (terminal letter i) alongside the sweet potato as 'age' (terminal letter e) saying "their food is bread (cassava)...and age; they use to flavour it the spice agi". Chanca was not himself confused, though his spellings are confusing. The Capsicum soon became well known as 'axi', today it is ají.

Columbus sent back to Spain by Antonio de Torres a description of his position, a statement of his plans and request for various substances, chiefly Spanish foods. He included a line of praise for Chanca.

Peter Martyr's position at court enabled him to see all the papers that Torres brought; and the wording of a letter in Latin that he wrote in September 1494, to the Archbishop of Granada contained matter drawn from Chanca's report. Was it purely accidental that Peter Martyr called the attention of a man of great influence in southern Spain to a plant which was to prove, if proving had not already commenced, its usefulness in Andalucía? Peter Martyr ends his statement by 'vocant hos globos ajies'.

The name "batata" makes its first appearance in print in 1516 with the publication by Peter Martyr in the 9th book of his second decade of a letter of 1514 in which he states that he had eaten the tuber, and that the taste of it had filled him with delight. He writes as with a new found esthusiasm that had not been aroused by aji. He gives the origin of the parent plant as Darién, i.e. at the South American end of the Isthmus of Panama to which the Spaniards had been paying attention in the few preceding years. He describes the batata tuber as like a turnip; so had he written earlier of aji; but he does not recall this; he is more precise, however in that he states the tuber to have been almost deceptively like turnips of his own home land (Insubres napos) and earthy in colour outside. Then he turns to the country of its origin, Darién, saying that it produces there tubers without attention (suapte natura nascentes) and is planted in gardens. Then of the tubers he adds, 'in whatever way they be cooked, whether roasted or boiled they yield place to no confectionary in delicate sweetness (dulcorata mollities)'. They had the whitest of flesh under a skin rather firmer than that of a turnip. The name that Peter Martyr uses appears as 'batatas', the feminine plural of a latinized noun batata. How like is this to its derivative potato.

I do not find the words 'suapte nascentes' so puzzling as some have thought them. In a land that is equitable enough the sweet potato plant persists in the soil; and it is customary to leave a corner of the plot of a crop unharvested to provide cuttings for the next crop. Someone who had visited Darién had seen the taking of the cuttings and their planting in a garden and had communicated this to Peter Martyr. It could have been the geographer Martín Fernández de Enciso who, when he was in Hispaniola in 1510, had heard of Alonso de Ojeda's planned expedition to Darién had volunteered and went under the idea that he was second in command, to find his authority disputed by another in Ojeda's absence and to be imprisoned. He returned to Spain and was for a time at court seeking re-

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dress, during which time he is said to have been in daily conversation with Peter Martyr. Enciso at any rate distinguished between aji and batata, writing in his *Suma de Geographia* (1519) "las batatas son mejores" — the batatas are the better.

Peter Martyr refers to batatas again in the fourth book of his third decade which was published immediately after the second in 1516. Therein he states that aji and batata were cultivated in Honduras as Columbus had found in 1502. Again in the fifth book of the third decade he names the two together among the chief foods of Carameira, a district on the east of Darién. Having recorded this he returns to the sweetness of batata — imra quadam dulci mollitie — in particular of the tuber of the most selected nobiliores - of its races. Again in the ninth book of his third decade he enumerates by Indian names from Hispaniola nine races of the sweet potato assigning them to aji. These to him were only some of innumerable kinds. It was always aji with him (written age) when he wrote of Hispaniola, and when he wrote of batata it was always the mainland in the direction of Panama.

Naturally one asks what could be behind this attitude. But before putting forward a theory two references may be quoted from Bartolomé de Las Casas who in one of them, like Peter Martyr, introduced the word batata into a description of an event of early Spanish discovery, an event of 1494 and thus ten years before the mention of batata in one of Peter Martyr's letters. Las Casas (Apolog. Hist. de las Indias, 1, chap. 169) was recording an exploration around the western end of Hispaniola by one of Columbus' captains in 1494 and batatas are named along with ajis as food. In another place Las Casas states that the extreme western part of Hispaniola produced batatas superior to the eastern part. The two references together give some cause for thinking that Columbus had landed where the inferior aji was the only form that he could get. They do not supply exactly what one would like to have, namely a date for the appearances of the word batata on Spanish lips as a result of discovering that the Indians in the west of the island were in possession of garden races which they so called. They suggest that the derivation of the word batata is to

be looked for to the west of Hispaniola. It is gradually made apparent in the literature that we have that the Spaniards' familiarity with batata grew with the widening of their explorations towards the west. Peter Martyr's references suggest that they found the best sweet potatoes that they came to know by their thrust into the area of Maya civilization. They would seek to bring the best to their central establishment of Hispaniola.

The plant itself supplies the next point in the argument. The aji is starchy and was suitable for the basic place that the Irish potato now occupies in temperate Europe and other parts of the world; it could be used for bread; the batata is sugary. The deposition of starch in the tuber of a plant is a preparation for rest; and the more efficiently a plant contrives the change of the sugar that is material in its tissues for a later day into static starch, the more fitted it is for a climate that imposes a season of rest. Therefore it would have been difficult for men like the American Indians to select sugary races such as the batatas where the climate, by imposing seasonal behaviour, worked against them. The batatas must have been ennobled more equatorially than was possible with the ajis. Have we in the batatas as they appeared in Hispaniola a product of Maya skill that just commenced to reach Hispaniola when Columbus discovered the island? Maya stone-cutting and Maya pottery had not reached the island (Krieger in Ann. Rep. Smithsonian Instit. for 1929, p. 485); but useful plants could travel before these arts. If the sugary races of the sweet potato were in process of such dispersal, do we not look for the origin of the word batata in some noun of the Chibcha languages? With this suggestion the argument is passed over to the philologists.

Oviedo's valuable Historia natural y general de las Indias, Islas y Tierra firme del Mar Océano was published in small part in 1526 and completely in 1538. His long service in the New World enabled his writing to be peculiarly authoritative in such subjects as that under discussion. Aji, he wrote, was widely cultivated in Hispaniola, the other Antilles and on the mainland; it was planted by cuttings and grew like a Convolvulus, covering the soil and producing in four or five or six months tubers resembling turnips

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such as were grown in Spain with a white and polished top, but larger than turnips usually are, white-fleshed as a rule, but sometimes yellowish and sometimes mulberrycoloured and if so tawny outside. He states that he had successfully transported the plant alive to Avila in Spain and that the Spaniards returning home would at times carry it with them and succeed with a favourable passage. They were doing what Columbus had done, carrying something interesting to them across the Atlantic; and as time went on doubtless carried now one race, now another.

Oviedo explains that aji was the starchy field crop and was so easily raised in the Indies and so satisfying that the Indians and Negros — the Spaniards had been bringing negro slaves into Hispaniola from 1502 — ate little else save flesh and fish; and it was planted abundantly on all farms and tenements.

It is clear that the crops thus described were direct successors to the crops that Columbus had seen, only now their abundance was forced, not by choice but by the masters of the land that they might supply a basic and cheap food. I owe to the kindness of Professor Carl Sauer a reference to the ordering of the planting of aji by Cortés when building his port on the Pacific coast of Mexico at Zacatula that he might have provisions for his labour. Cortés wrote as a Spaniard of the Conquistadores, using a word common among them, but superfluous in Mexico where the sweet potato had its own name.

Oviedo gives a separate chapter to batata, to which he assigns some of the races that Peter Martyr had assigned to aji. To Oviedo batata and aji were different species, the batatas sugary and their leaves digitate; the ajis starchy and their leaves cordiform. The flesh of batata was more tender and more digestible as well as sweeter in varying degree and could be prepared into dainties as good as the best marzipan. He gives the colours of the skins and flesh of various races. These the Spaniards liked and they served them with wine and rose water and cooked in many ways, not to the exclusion of aji but in preferment. The tenderness of the plants required the individual care of garden cultivation.

In the transfer of the sweet potato to Europe the

Atlantic islands shared; the Azores, the Cape Verdes, the Canaries and Madeira received it, no doubt in as great or greater variety than Spain, both aji grade and batata grade. Writer after writer popularized the name batata as belonging to the better races that the Spaniards in the New World took care to have available for their tables while they saw to an abundance of aji for the slaves. Having returned home they might be compelled to accept something short of the best, but they were not willing to accept it under the name of aji; consequently every race when raised abroad for the masters was a batata and this name soon spread beyond Spain. Antonio Pigafetta's use of it illustrates the spreading. He, being in Barcelona, heard of the proposals for Magellan's expedition and volunteered and then spent the summer and autumn of the year 1519 in Seville awaiting sailing. He was one of the thirty one survivors. On his return in 1522 he deposited his diary in Spain; but he had prepared a carefully written account for presentation to Louise of Savoy, Queen Regent of France, and in this he names "patates" as if this were a well known name.

It is obvious that he expected to be understood and that batata in the form patate had extended into France. Probably he had eaten batatas during the waiting in souther Spain before sailing; then we know that he ate them on the South American coast and he claimed to have met with them in the Ladrone islands. Four years after his return Andrea Navagero was sent by the Republic of Venice as ambassador to Seville and in 1529 he told his friend Ramusio that Andalucía was producing American plants such as batatas.

In 1566 Charles de l'Escluse (Carolus Clusius) made a tour in Spain during which he saw in Andalucía in cultivation three races of the sweet potato, which he described in his *Rariorum stirpium per Hispaniam observatorum Historia* (p. 297; 1576). They were all white fleshed; one was white-skinned, another rose colour and the third red. The name batata or patata applied to all. Málaga produced the best tubers and enjoyed an export to Cadiz and Seville. Clusius recalled the name aji, adding that some say agis to differ from batatas; he did not mean some in Spain,

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but some writers of the books that he had consulted. Aji by then seems to have become a word forgotten in Spain. Nicolas Monardes wrote in 1574, and confirmed what Clusius had written, but not then published, regarding the cultivation. About the same time, so Amatus Lusitanus tells us, the tubers used to reach Lisbon from the Atlantic islands and we know that sometimes they would be carried on to London. Clusius wishing to try them in Vienna, came to London to buy them, succeeded in getting them; but decay set in before he could get to Vienna.

The Portuguese have invariably used the name batata or patata; and they were quick to carry the plant to the settlements that they made in Africa, in consequence of which they implanted this name in various parts of that continent. It is patata or patato among the Mandingo of Gambia; patat or patas among the Wolof of Sierra Leone; matata in the Sobo language of southern Nigeria; bado in Manja in the Gabun; imbatata and m-batata in various Congo languages; i-batata in Mozambique; nhlata in Thongwa in British East Africa and badado in Somaliland.

The Portuguese carried it across the Indian Ocean to India and used the name batata in Goa. S.R. Delgado finds this name in all the languages of southern India (Influencia de Voc. Port. en Lang. Asiat., p. 24; 1913); but the peasants in general have their own names for it preferring for instance such as mean sweet yam or sweet tuber. This is interesting: when the Irish potato (Solanum tuberosum) reached India it became known in Goa as batata de Suratte from its port of entry, while the sweet potato remained batata.

The Portuguese carried the sweet potato also to Malaysia over most of which it spread quickly, not so much under the name batata but under the name of yam of Castile — ubi kastela. However from Timor and from northern Celebes batata having got a footing radiated somewhat. The eastward streaming of the plant ended with Malaysia. I believe that this stream carried white skinned tubers before it carried red skinned; but it carried both. I believe that the white came first, partly because it would seem to have been available for transport first, but also because three travellers when they encountered the red skinned thought its presence worthy of remark; one of these visited El-mina on the Gold Coast in 1600 (de Bry, Peregrin. Ind. Or. et Ind. Occ., 6 p. 97); one visited Benin (Arkstee & Merkus, Hist. d. Reisen, 3 p. 244; 1749); and Nieuhoff visited Java (Churchill's Voyages 2, p. 344; 1704). But Dalziel disclosed a belief held in northern Nigeria to the contrary (Useful pl. W. trop. Afr., p. 437; 1937) and there is a part of the Gangetic plains in India where the peasants call a red skinned race the indigenous kind, meaning pre-European, and their white skinned race, the European kind. However there has been time enough for intricate dispersal.

The Pacific islands received the sweet potato from the Peruvian coast; and the best explanation of this event is Hornell's (Journ. Linn. Soc. Lond. Bot. 53, p. 41; 1946). Later they received it by Spanish ships from the Mexican coast. Neither stream brought the word batata but brought the names respectively of Peru and Mexico.

The name aji meanwhile became obliterated in its home. The Spanish Conquistadores, the men called by Columbus 'gente dissoluta que no teme a Dios ni a su Rey ni Reyna (without fear of God and King) and described by Las Casas as "living as the saying like Moors without a King" — these men had destroyed Hispaniola by 1630 and left it the desert that they had created. With the disappearance of the Indians the local language disappeared, save words useful to the Spaniards who had adopted 'aji' at first, but let it slip apparently because as they spread from Hispaniola they found its use by the Indians too local. Aji is obvious in "haios" used by the Italian Girolamo Benzome who, joining the Spaniards in 1541 went to Venezuela and recorded his experiences there in a report published by De Bry (op cit. 4. p. 70: 1592). 'Aje' was a name so obscure to Sloane that in his catalogue of the plants of Jamaica (1690) he referred it to the genus Dioscorea.

Into the history of desolate Hispaniola came the buccaneers, living legitimately by slaughtering the wild cattle to trade in their hides and illegitimately by piracy; then came. French planters, two of whom have left information of interest on the sweet potato. The first was the Chevalier F.R. de Tussac who after a residence of 15 years lost his venture in a rebellion, but had the means of publishing the

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four volumes of his *Flora Antillarum*. In the fourth volume (p. 4: 1827) he names as a race of the sweet potato "chiam". Surely this is a word of origin from aji. Chiam was one of two races that were grown for the plantation slaves, i.e. a race used as the Spaniards had used aji. Tussac names another inferior race grown for the slaves, 'guiogui'. It is a name that appears in Margrav's account of Brazil (Hist. rer. nat. Brasil. p. 16; 1648) in the extended form quioquequiampulu and is there ascribed to the Congo, whence the Dutch were transferring great numbers of slaves to Brazil. I do not think that my derivation of chiam from aji should be rejected because alongside was used a negro word.

The other writer of Tussac's period was Michel Etienne Descourtilz. Among the inferior races which he names (Fl. pitt. et méd. des Antilles, 8 p. 71; 1829) was one called "jahuira". It is possible that it came from aji.

Ipomoea batatas has innumerable ill-fixed races which if one would arrange them taxonomically, must be arranged by man-maintained characters. The first divisions fall well in this manner:

Tubers starchy; leaves in general cordiform. Vegetatively vigorous and used for feeding animals.

Vegetatively less vigorous and a food of man particularly where starch is the object. Tubers sugary; leaves in general digitately lobed.

The vocable 'aji' would cover the first two groups, both of which were probably in Hispaniola when Columbus discovered the island, but chiefly the second. The vocable batata covered the third and it possibly had only a small place in Hispaniola at the time in consequence of the difficulty of acclimatizing that which was difficult to keep in a resting condition in a climate demanding a rest. The same difficulty beset the Spaniards in their attempts to convey across the Atlantic the sweetest batatas, whereas it was not difficult to convey and establish the starchy ajis. The name var. *cordifolia* has been used for the ajis collectively.