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From Asia to Aigina: The story of the pistachio tree

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The pistachio tree (*Pistacia vera* L.) in Greece is connected with the island of Aegina. It is the main crop on the island, the nut is called "Aeginian pistachio" to distinguish it from the peanut which is called in Greece "Arabian pistachio" and the Greek female cultivar of the tree is called "Aigina".

For a long time the origin of the tree was obscure. At the end of the 19th century De Candolle, Boissier, Engler and other botanists considered Syria, Turkey and Mesopotamia to be the home of *P. vera* and this is still written in horticultural books. In 1929-1930, though, Russian botanists (Popov, Morozoff and others) who visited Central Asia discovered *P. vera* growing wild in huge stretches of mountains and plains, forming savanna like park forests in semi arid environments. The data from West Asia were no doubt taken from cultivated trees. The area of wild *P. vera* extends from Northern Iran, Northern Afghanistan, Southern Turkmenistan, East Uzbekistan, Tajikistan, Kyrgyzstan (Zohary, 1950-1952). This indicates that Central Asia is the home of the wild progenitor of this nut. But the presence of *P. vera* in Central Asia was noticed also earlier by other visitors of the area. In 1841 a traveler A. Lemann wrote in his memoirs that in a march he made on the mountains of Tajikistan, near the border of Uzbekistan, he walked for 50 verst (55 kilometers) mostly through pistachio forests (Bretzl, 1903).

From archaeobotany there is also evidence that Western Asia is not the home of the pistachio. In the many excavations carried out in South West Asia and the Mediterranean Basin in settlement of the Neolithic period (10.000-3.000 B.C.) and the Iron Age (1.000 B.C.) no pistachio remains were found before the classical period (Hellenistic and Roman) (Neef, personal communication). But in the very few excavations carried out in Northern Iran and Uzbekistan in settlements of the Bronze Age (1.500 B.C.) pistachio shells were detected (Miller, 1999).

Some more evidence comes from the ancient Greek literature. In this the pistachio is not mentioned before the 4th century B.C. The first who wrote about it and described it was Theophrastus.

Theophrastus was born on the island of Lesbos in 372/371 B.C. He was a friend and pupil of Aristotle and as such he became a peripatetic philosopher. When Aristotle retired in 322/321 B.C. he designated Theophrastus as head of his school. Theophrastus was head of the school for 34 years and under him the school was frequented by the highest number of students (about 2.000).

Theophrastus was also a prolific writer, but from his many works (about 240) only three were preserved completely; the "Characters" and two botanical works "On the History of Plants" and "On the Causes of Plants". These two works were the first botanical handbooks in use until the Middle Ages. Theophrastus is considered to-day the father of Botany. In the work "On the History of Plants" he described the plants that grow in different environments and areas. In the chapter on the plants of Asia he describes the pistachio tree as follows:

"Some say a tree grows there that is like the terebinth; this in leaf, twigs and all other respects, but the fruit is different being like almonds. In fact they say that this sort of terebinth grows also

in Bactria and bears nuts only as big as almonds; and they closely resemble almonds in appearance, except that the shell is not rough; and in savory and sweetness they are superior to almonds, therefore the people of the country use them in preference to almonds" (H.P. IV, 4, 7).

Theophrastus does not give the name of the tree. However, it is accepted that this is the description of *P. vera*. An other thing that we note in this text is that it starts with the words: "Some say ...". So he has not seen the tree himself and we know that he had never been to Asia. He got the description from another person. This is something that we find very often in his writings. He describes plants from places that he has never visited himself. But he had many students and he got his information from students that he sent in different regions to study plants according to his instructions.

In the case of the pistachio he must have got the information from one of the scientists who followed Alexander the Great in his campaign into Asia. Alexander had taken with him a group of scientists, mostly historians who were charged with narrating the military part of the campaign, but also to describe the lands, the climate, the people and their habits, the animals and the plants. When he reached Hyrcania and on his way further east, the Greeks came into regions that they had never visited before. They saw then for the first time the cotton, the rice, the giant banyan tree (*Ficus bengaliensis*) and obviously the pistachio. One of the most important achievements of the campaign is the knowledge acquired in zoology, botany and especially geography (Briant, 1987).

Among the historians was a nephew and pupil of Aristotle and also companion of Theophrastus, Kallisthenis. Aristotle who has educated Alexander, as his teacher, recommended him to take Kallisthenis with him in his campaign. And it seems very probable that Theophrastus obtained the description of the pistachio tree by Kallisthenis.

In the 2nd century B.C. the poet Nicander in a poem in which he enumerates plants that protect from sting of scorpions he mentions the pistachio nuts. "... *the pistachio nuts which look like almonds upon the boughs by the Indian flood of the roaring Choaspis*" (Theriaca, Line 891). The interesting thing about this line is that the word "pistachios" (in Greek πιστάκια) is mentioned for the first time in the Greek language. The word comes from the ancient Persian word "pista" which means pistachio. Pista is the root for the word pistachio in many languages; pistache (French), Pistazie (German), pistashka (Russian), fustuk (Arabian), fistiki (φιστίκι, Greek).

Later the tree has moved west. In the 1st century A.D. Dioscorides (De Materia Medica, 1,124, 1,1) writes that the pistachios were produced in Syria and that they had medical properties. According to Pliny the elder (Natural History, XV, 83, 91) the knight Vitelius brought the pistachio in his house in Rome at the end of the reign of Tiberius (around 30 A.D.) and the same year the knight Flacus Pompeius introduced it into Spain.

In the 2nd century A.D. Athenaeus from Alexandria (Deipnosophistae, XIV, 649 d-e) gives details about the pistachio. He writes among other things that the nuts are produced in Syria and Arabia, and that they are famous for their good taste.

Although the Greeks knew the pistachios and appreciated them as nuts, the time the tree was introduced in Greece is not known. The Greek naturalist Gennadios did some research on that subject (Gennadios, 1914). He found that the presence of *P. vera* was not reported before the 19th century. Early in the 19th century in agricultural journals and handbooks the pistachios were considered as a product from Asia that was introduced in Greece from Halep and Persia. Gennadios informs us that individual trees might have existed but no commercial orchards.

Individual trees existed indeed. In 1828, shortly after Greece became a free state, a French army under General Maison landed in the Peloponnesus in order to clear the place from the Egyptian troops that were still there. The French Academy sent with the army a group of scientists to make some studies on the new state. Among them was a famous naturalist, Bory

de Saint Vincent. Bory de Saint Vincent published a book on the flora of the Peloponnesus and the Cyclades in which he writes that in the sites Pylos and Phygalia he saw pistachio trees (Bory de Saint Vincent, 1838). Pistachio trees were also observed in 1856 on the island of Zante (Gennadios, 1914).

The first organized pistachio orchard was established in 1860 in a suburb of Athens by Pavlidis the man who introduced the chocolate industry in Greece. Gennadios himself organized in 1882 pistachio nurseries in Athens, wishing to propagate the culture of this nut in the country (Gennadios, 1914).

It is not known if in the early 19th century individual trees existed on Aegina. There are only oral testimonies that pistachio trees were brought to Aegina from Syria, Persia and the island of Chios.

The Austrian botanist von Heldreich visited the island six times between 1848 and 1881 (Heldreich, 1898). During these botanical trips he must have walked across the whole island, because in his work "Flore de l'île d'Égine" he mentions all the villages, shores, sites, monasteries, the Afaea temple, even private homes and gardens. In his publication he describes the wild plants he has seen, but he includes also data from all botanists who visited Aegina before him. Besides he mentions also the cultivated crops. The most important one was the vine but there were also olives, figs, lemon trees, vegetables, cotton, barley. He does not mention pistachios. But if there were individual trees in private gardens they could have escaped his notice.

Lately some evidence was found that pistachio trees existed before 1896. In the historical archives of the island there is a document about pistachios (Giannuli, personal communication). An inhabitant of the island possessed 12 oke¹ (14.5 kg) of nuts for sale. The quantity is small. It is improbable that it represented some kind of important commerce. One would rather think that these nuts came from one or two trees in a private garden.

The first commercial pistachio orchard on Aegina was established by Nicolas Peroglou around 1896. Peroglou was not aeginetian. It happened that he spent summer vacations on Aegina and he liked the island so much, that he decided to buy some land to cultivate it. His property was about two hectares and he planted it with fruit trees and nuts. However, because of the vicinity of the sea and the poor soil of the place the different species did not thrive, with one exception; the pistachio. So he replaced the trees who had failed with this nut. Although he was an amateur as a farmer, he was very thorough and did a good job. He was in contact with professors of horticulture and followed their advice. All his trees were grafted on *Pistacia terebinthus* L., he had female and male trees in a right ratio and also two or three different female cultivars.

The contribution of Peroglou was not the fact that he established the first pistachio orchard on Aegina. It was the effort he made, all his life, to expand the cultivation of the tree on the island and in Greece. Aegina was a very poor island and he strongly believed that this crop would become a main economic resource for the people. At that time one oke of dried pistachios cost 3-4 drachmas and the price of one oke of bread was 75 cents. In 1935 one oke of dried pistachios cost 120-125 drs. and the price of one oke of bread was 8 drs. Today one kg of dried pistachios cost 5.5-7 € and one kg of bread 1.2-1.6 €.

Peroglou distributed scions from his best trees. He convinced his neighbours and his friends to plant pistachios in their gardens, he published a bulletin on the cultivation of pistachios and when he wanted to give a present to somebody he offered him a young pistachio tree.

¹ Turkish and Egyptian weight, equal to about 1200 gr.

People followed his example and advice. They planted pistachios around their houses, in small and in large plots. Later they replaced the vineyards with pistachio orchards. The cultivation of the tree expanded on the island, nurseries were established to fulfill the demands. Between the two World Wars, Aegina became the most important pistachio growing area in Greece.

In the decades of 1950 and 1960 the cultivation of pistachios expanded all over the country from south to north and on the islands. Aegina is no longer the main pistachio producing area of Greece but historically it remains the area from which the pistachio production has started.

References

- Bory de Saint-Vincent M., 1838.** *Nouvelle Flore du Peloponnèse et des Cyclades*. Paris: F.G. Levrault, Libraire-Editeur, p. 87.
- Bretzl H., 1903.** *Botanische Forschungen des Alexander Zuges*. Leipzig: Verlag von B.G. Teubner, p. 412.
- Briant P., 1987.** *De la Grèce à l'Orient Alexandre le Grand*. Gallimard, p. 176.
- Gennadios P.G., 1914.** Pistakia. In: *Lexicon of Plants*. Athens: P. Leoni, p. 783-791 (in Greek).
- Heldreich von Th., 1898.** Flore de l'île d'Egine. In: *Bulletin de l'Herbier Boissier*, p. 221-400.
- Miller N.F., 1999.** Agricultural development in Western Central Asia in the Chalcolithic and Bronze Age. In: *Vegetation history and archaeobotany*, 8, p. 13-19.
- Zohary M., 1950-1952.** A monographical study of the genus *Pistachio*. In: *Palestine Journal of Botany Jerusalem*, ser., 5, p.187-228.