ALL ABOUT YEW: ON THE TRAIL OF TAXUS BACCATA THROUGH EU AND ITS ARCHAEOBOTANICAL STUDIES

INTRODUCTION

The palynological history of Taxus baccata is controversial because it is a pollen that has been generally ignored in pollen analyses in part because it is not easily identifiable or simply has gone unnoticed, given the limited interest in its determination by most of palynologists. Moreover, despite being an anomalous pollen and easily identifiable, the number of published works on the issue is quite low due to the low resistance to friction. The signs of such activity are still visible in the same area and in the same site. The available pollen data show an increased frequency of the taxon during the Early Neolithic, in connection with the expansion of meso-thermo-mesophilous trees, reaching maximum values in the mid-Holocene, between 6.3 Kyr BP. During the second half of the Holocene the presence of this taxon remains in some areas although with lower values.

POLLEN-CHELAR CHARCOAL INTEGRATION

The archaeological information from the NW Mediterranean region encompasses the NE Spain (Castellon and Catalonia) and the French territories of Eastern Pyrenees and the NW of Languedoc. Yew macroremains are rather more abundant especially charcoal. The Garrotxa region (northern Girona) holds a great number of sites where yew has been recorded. Furthermore, this area has also provided the first manufactured wooden tools found in a western Mediterranean context: La Draga lakeside settlement (see below). Other plant macro-remains have also appeared in La Draga and southwards in two early Neolithic sites: Cova Fosca and Mas del Castell. Although the pollen curves of yew considered here start over the mid-Holocene (7 Kyr BP), there are continuous charcoal evidences recorded previously (12.5 Kyr BP) since the Epipaleolithic and the Mesolithic (Aubedour in France, Cova del Vidre and Bauma Serrat Pont in Catalunya). However the Neolithic is the period in which yew is more widely exploited. Grotta Tounier in SE France but also in most of the catalan sites of the Garrotxa (Bauma Serrat Pont, Avallars, Puenset, Planaudesa, Draga, Cova 120) and the caves of Guineu and Cova del Frare both located in Barcelona. The latter has recorded a decreasing curve of yew from the Early Neolithic until the Bronze Age that perfectly matches the “Age of Yew” (7-7 Kyr BP).

OTHER ARCHAEOBOTANICAL EVIDENCES

Yew wood is renowned for its long-term duration and it is highly appreciated for turning and woodworking. Yew was widely used in Europe for making bows and spears. The latter gives it the nickname of “tree of the war”. In the La Draga lakeside settlement a large number of manufactured tools have appeared, among them Azoles and Bowes made of yew, joining the European prehistoric record of weapons that goes back to the Upper Pleistocene (150 000 yrs). During the Neolithic yew wood was employed for endless number used Bows, but also blades for the copper extraction, for the construction of fences, houses and enclosures. In Asturias it is said about yew that “its wood lasts longer than an iron bar”. The axes of the carriages wheels were usually made from yew wood because of its resistance to friction. The signs of such activity are still visible in many of the yews throughout the Asturias territory.

2. PLANT MACROREMAINS

Among the archaearchobotanical remains some fruits have appeared in three early neolithic sites: La Draga (Girona), Cova Fosca and Mas del Castell (Castellon). The yew is the only evergreen species in the area and its consumption by humans dates back to prehistoric times (at least since the Neolithic period, according to some recent evidences). Until recently the red and sweet fruits of yew have been traditionally consumed for generations (especially the children) in many villages of northern Spain. Regarding animals, blackbirds, stockades and thrushes are as well as badgers, foxes and martens take advantage of its poisonous components although in the case of cows it provokes abortions. In the Betic ranges (SE Spain) the Edicts of yew trees of the bouquet of Palm Sunday ("el ramu") also took place around this tree. Yew also represents the soul of the deity in being planted in the cemeteries, a major memory of a culture to whom the yew was consecrated. It has been considered Tree of Wisdom, Sacred Tree or Temple-tree, thus connecting with the presence of yew in the sacred trees in the forests and the towns. The yew was used as a sacred tree in the burial rituals, and its leaves were used to prepare the offerings to the gods.

CONCLUSIONS

The integration of different disciplines in the study of Taxus baccata indicates the presence of this taxon in the NW Mediterranean region. However the bulk of archaearchobotanical information comes from the Cataleya. Both Palynological and Anthropological approaches are chronologically and paleoecologically consistent. Once the yew appears in archaeological contexts it is not possible to establish its presence in the environment by the archaeological record. According to charcoal data this exploitation starts since the Epipaleolithic-Mesolithic but it is during the Neolithic when the taxon is largely exploited throughout all the area under study, reaching its highest values during the Chalcolithic and Bronze Age. Historical and ethnographic sources also revealed a continuous exploitation of this tree for multiple purposes. Not only yew was harvested on a strong pressure for this tree but the remnants with their constant grazing have also contributed to the vegetal cover to the most inaccessible areas of mountains. The various place names related to yew that have been found are also related to the geography of the studied area, testify the former extension reached by this taxon in the past. An enlarged number of years started from ancient times besides old churches, cemeteries or in the squares of villages (more than 250 years only in Asturian territory) witnesses the old cult that has always been given this tree as a blessing for centuries the duty of living and honoring the memory of the dead.

Despite the high toxicity of yew many animals feed for the leaves of yew. Rumnants (red and roe deer, even bovines) cope better with their poisonous components although in the case of cows it provokes abortions. In the Betic ranges (SE Spain) yew was used to browse on yew trees. When this practice became excessive it could have prevented its regeneration. However the use of yew as a source of food and fibers (25 gr of leaf per Kg of weight is enough to feed a horse). The use of leaves in forms of steam favors the respiratory tract of animals as noticed in some parts of Asturias. The Emperor Claudius, issued an edict in 32 AD to ban its consumption as it is noted that the use of yew was the last asylum for the susceptible. The toxic components of yew in small doses stimulates cardiac activity and increases blood pressure. It is also used against rheumatism, arthritis, hepatic disorders and hardness of the urinary tract. Studies on yew alkaloids have discovered the tarax, a substance extracted from the bark of yew that has proved to be a powerful anticancerogenic. The yew pulp was used in some areas of northern Spain to prepare sprays for pectoral applications. People from northern Iberia improvised the tip of their arrows with poison of yew causing knock on effects on the enemy. They even committed suicide with it when they were captured by the enemy after losing a battle. This practice was in fact very common among Cantabrian and Asturian pre-romans to avoid slavery of theRomans.

LIFE AND DEATH AROUND “CULTURED” YEWS

A great number of “cultured yews” planted beside old churches, manor houses, town squares and cemeteries bear witness to the strong attachment that this tree was used in the old traditions and life of villages in northern Iberia. Major events of the community were held under this tree for centuries: opening of laws and justice, readings and oaths under the yew were inviolable. Festivities and rituals of religious character like Processions, Kiss of the yew trees, the ouroboros were performed around this tree. Yew also represents the soul of the deity at being planted in the cemeteries, a major memory of a culture to whom the yew was consecrated. It has been considered Tree of Wisdom, Sacred Tree or Temple-tree, thus connecting with the presence of yew in the sacred trees in the forests and the towns. The yew was used as a sacred tree in the burial rituals, and its leaves were used to prepare the offerings to the gods. Yew is able to take advantage of these traditions by planting yews besides churches.