

# The willow (*Salix* sp.) toothpicks from the Cistercian Monastery of Lorvão (Penacova, Portugal)

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## **Notes on Ethnobotany**

### **Abstract**

In Portugal, the tradition of handmade white willow (*Salix alba* L.) toothpicks began in the Cistercian Monastery of Lorvão (Penacova), in an uncertain date during the 17th century. After the suppression of all monastic orders (1834), people from Lorvão continued this craft and, later, this parish became the main Portuguese center of the toothpick industry, an activity that still flourishes today. Handmade toothpicks, following ancient methods, are now made as a cultural symbol of the Penacova region.

Keywords willow wood, toothpicks, monastery traditions.

# The Cistercian Monastery of Lorvão

The Monastery of Holy Mary of Lorvão is situated in a valley (Figure 1-2) close to Penacova, in the Centre of Portugal, and there is no consensus about the date when it was founded. The first records date from 878 A.D., a period when the territory was in the forefront of continuous clashes between Christians and Muslim, after the invasion of Iberia Peninsula in 711 and the reconquest of this region in 1064, by King Ferdinand I of León (c.1015-1065). Originally, the monastery housed a community of Benedictine monks who, although primarily responsible for the agrarian development of the region, also created extraordinary, illuminated manuscripts. Two of these survived: the Book of Birds (a bestiary) and the Book of Revelation (Apocalypse of Lorvão) [1]. This later one (Figure 3-4), was executed circa 1189 and is included, since 2015, in the UNESCO's Memory of the World Programme created in 1992 and intended 'to guard against the collective amnesia, calling upon the preservation of the valuable archive holdings and library collections all over the world and ensuring their wide dissemination' [2]

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Figure 1. Lorvão Monastery in the early 20th century, postcard (private collection).



Figure 2. Lorvão Monastery in the mid-1920's, postcard (private collection).

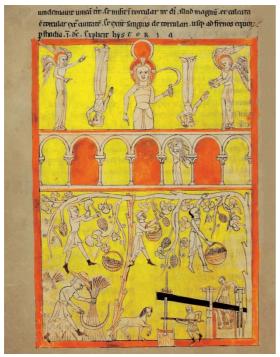


Figure 3. Lorvão Book of Revelation representing the harvest of grapes and cereals; Arquivo Nacional da Torre de Tombo, PT-TT-MSML-B-44, folium 210r

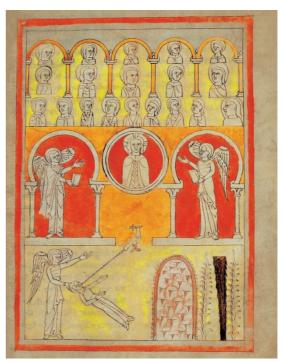


Figure 4. Lorvão Book of Revelation with the Tree of Life, Arquivo Nacional da Torre de Tombo, PT-TT-MSML-B-44, folium 172v.

In the early 13th century, a new monastic community of nuns was established under the Cistercian Rule, the first in Portugal, and it survived until 1834, when all convents and monasteries were suppressed in Portugal. The male communities were immediately closed, but the female ones could continue, albeit they were not allowed to receive novices. The last nun of Lorvão died in 1887, ending the life in this building (Assumpção 1899). In 1910, the monastery was classified as a National Monument (DGEMN 1960), and, since then, it has had other functions, including a hospital. It now houses an interpretation center that evokes its rich past and soon, a hotel is planned to open in the former monastery premises.

## The Lorvão Toothpicks

The toothpicks from Lorvão began its history in the homonymous monastery when they were prepared by the nuns and their servants. The Portuguese monastic feminine orders accepted not only the nuns but also their retinue of servants that would continue to prepare and serve dishes their employers were used to in their former homes (Silva 2000). It was within this socio-cultural context that numerous ancient food recipes were preserved, making Portuguese culinary, especially the so-called 'Conventual Sweets', one the richest in Europe. As the presentation of those sweets was important, delicate flower and eyelash toothpicks, or simpler ones, were created to add a note of refinement and a touch of unparalleled good taste.

The origin of Lorvão toothpicks is uncertain; the first mention dates from an account book from the 17th century. A local story explains that all began because the nuns did not like to touch in the sweets with their own hands. So, one day, an abbess asked a servant to sharp some laurel branches (*Laurus nobilis* L.) to use them as sticks. But laurel was not a suitable wood for making picks, and the nuns began trying other woods until they realize that white willow (*Salix alba* L.) was the best. Its wood is white as ivory, flexible, and sweet flavored, so the nuns could not only use it to hold small cakes but also to pick the remains of the delicacies stuck in their tooth (Silva 2000).

Even when the nuns still inhabited the monastery, people from Lorvão already made toothpicks to complement their income, as wrote in this midd-19th century description of Coimbra region: 'the residents of Lorvão, men, women and children, are perhaps the only people in the country who are dedicated to the small industry of making toothpicks, and to their export to the various cities of the Kingdom, from where they even go to foreign markets' (Secco 1853).

The wood of the white willow was obtained in the surrounding ecosystems, where this tree grew by the rivers and streams that run through the region. The white willow's wood was always the elected one, but woods from other willow's species or from poplars (*Populus* sp.) could also be used. Trees from the Salicaceae family had a high cultural significance in this region, located near Coimbra, a city where is located a famous university, founded in 1290, and one of the oldest in Europe. An example of this cultural relevance in the well-known romantic '*Poplar Grove*' sang by Coimbra University's students in their nostalgic songs (Figure 5-6). In the late 19th century and early 20th century, when willow and poplar woods from the local ecosystems became scarce due to overexploitation, they were imported from other Portuguese provinces, such as Ribatejo, where the biggest river of Iberia runs – Tagus (Tejo) –, with many willows on its banks. The economy of Lorvão depended almost exclusively on toothpicks, as we can read in an article published in the magazine Ilustração Portuguesa: '*The currency is the toothpick, the authentic one, the pack of which is worth a few grams of coffee or flour, a few deciliters of wine. The man at the store and the stall receives toothpicks, he does not receive money, but he examines the coin [toothpicks] with scrupulousness, with the rigor of someone checking old signatures on ancient parchments. Everything is weighed, measured, counted, and reciprocated in kind' (Colaço 1913). It was in the local store that people bought the wood, when it became scarce and, in the same store that people handed the toothpicks, exchanging them for more raw wood and some food.* 

At the end of the 19th century and in the first quarter of the 21st century, toothpicks were represented, and awarded, in regional fairs and exhibitions, such as in Coimbra (1869, 1884), Lisbon (1888), Oporto (1891), Paris (1900, 1910) [Figure 7], Panama (1915) and Rio de Janeiro (1922) (Silva 2000). In 1879, Júlio Augusto Henriques (1838-1928), professor of Botany at Coimbra University, offered a collection of Lorvão toothpicks to Kew Gardens [Economic Botany Collection Catalogue Numbers 41395, 41399] that is still preserved and was selected to be part of the permanent exhibition Plants + People held in the former Kew's Economic Botany Museum from 1998 to 2016 (Griggs *et al.* 2000).



Figure 5. Coimbra's Poplar Grove [Choupal] in the early 20th century, postcard (private collection).



Figure 6. Coimbra's Poplar Grove [Choupal] in the early 20th century, postcard (private collection).



Figure 7. Box of toothpicks awarded in the Paris Exhibition of 1900 (private collection).



Figure 8. Coat-of-Arms from Lorvão, with a laurel tree flanked by toothpicks.

The coat-of-arms from Lorvão evokes its botanical history because the main element is a laurel tree (*Laurus nobilis* L.) flanked by two sets of toothpicks (Figure 8). The laurel is a common plant in the region and some authors defend that the toponym Lorvão may be etymologically linked to *Laurus vana* (from medieval Latin *lauribano*), which means 'hollow laurel tree', alluding to a big historical tree that tradition says existed in this area (Borges, 1977, Piel 1982, Antunes 2013). A local legend has it that the Monastery of Lorvão began to be built in Aveleira (a toponym that evokes hazelnuts – *Corylus avellana* L.), in the Ribeira de Vale Bom, but something strange happened. All the work done during the day was destroyed during the night. After this happened several days in a row, a worker decided to stay awake to see what really happened, and he saw God himself demolishing the building. Speaking to the worker, God said that the monastery should be built in a place where there was a hollow laurel tree – *Laurus vana* – and where the waters of a river flowed in reverse, that is, from west to east. After searching for the right place, Lorvão was chosen, and the monastery built (Silva 2015).

# Making the toothpicks

After the suppression of the religious orders, toothpicks continue to be handmade by locals, and the number of people working in this craft increased dramatically from 80 in 1861 to 3500 in 1910. The toothpicks manufacture was always a cottage industry to complement farmers' incomes, and the work was done by every member of the family, including children and elderly people (Figures 9-12). This activity could also be done in periods when the labors in agriculture were less demanding (Silva 2000).



Figure 9. Carving toothpicks in the early 20th century. Illustration from the book *A Arte e a Natureza em Portugal* (1902).



Figure 10. Carving toothpicks (1913), *Illustração Portuguesa* 364 [February 10th]: 169-173.



Figure 11. Carving toothpicks in the early 20th century. Câmara Municipal do Porto. Arquivo Histórico, ID 298528.



Figure 12. Carving toothpicks in the early 1930's, postcard (private collection).

All toothpick begins as wood of willow trees, cut during the vegetative rest, in January and February. The wood is split, cleaned, selected, and dried in the sun (Figures 13-14), during March and April. If needed, the final drying stages can be done in a large traditional community bread oven (Figure 15) or, if necessary, even in a common kitchen oven. It all depends on which type of toothpick the artisan intends to make, because if the toothpicks need more details (for instance, the so-called *flower* toothpick), then the wood cannot be too dry (Silva 2000).



Figure 13. Buying willow's wood from a local shop (private collection).



Figure 14. Drying the wood in the sun (private collection).



Figure 15. Drying the wood in the community bread oven (private collection).



Figure 16. Splitting the wood (private collection).



Figure 17. Willow's wood, knife (to carve) and toothpicks, photo graciously given by DGARTES/The Home Project Design Studio/2023.



Figure 18. Neighbors working in the street (private collection).

When the wood is ready, it is split in small pieces (Figure 16-17). These are progressively cut, and the final stage is made with the artisan seated on a small bench. When weather conditions allow, neighbors may gather in the street (Figure 18), to carry out this activity using the sunlight (Brütt & Cunha 1902). The craft is done energetically, with simple utensils – a knife works the wood over a strip of leather [the *coira*] that is firmly attached to a knee and a foot. It is over the '*coira*' that the artisan gives shape to the toothpicks (Figure 19-21). Their technical and dexterity skills were developed within a family context, since

childhood, and can be performed by men or women. In the recent past, a great variety of toothpicks were made for several uses, such as: giant toothpicks to use in pharmacies, double-ended toothpicks for clean the small pieces of watches, lollipop sticks, among many other uses. The boxes to pack the toothpicks were made with birch wood (*Betula* sp.) (Silva 2000) [3].



Figure 19. Working over the coira (strip of leather) to sharp the wood (private collection).



Figure 20. Working over the *coira* (strip of leather), photo graciously given by the Município de Penacova.



Figure 21. Instruments to carve the willow's wood, *coira*, and basket to keep the toothpicks, photo graciously given by the Município de Penacova.

Nowadays, most handmake toothpicks are the so-called *flower* (Figure 22) and *eyelash* types (Figure 23), which are considered luxury products (Figure 24). The *flower* toothpicks are wrapped inside small conical packets (Figure 25), but they can also be sold inside boxes, like the ones made for matches (Figure 26). The common toothpicks are counted (Figure 27), wrapped (Figure 28) and put inside boxes (Figure 29). Due to new hygiene standards, they cannot be sold for food uses. In addition to toothpicks, artisans also create other pieces from willow's wood to complement their income (Figure 30).



Figure 22. Late stages of carving a *flower* toothpick (private collection).



Figure 23. Late stages of carving an *eyelash* toothpick (private collection).



Figure 24. Eyelash (left) and Flower (right) toothpicks, photo from Beja Botanical Museum collection.



Figure 25. Toothpicks wrapped in conical paper package; photo graciously given by Fátima Lopes (artisan).



Figure 26. Toothpicks sold in boxes; photo graciously given by the Município de Penacova.



Figure 27. Counting the toothpicks (private collection).



Figure 28. Wrapping common toothpicks (private collection).



Figure 29. Traditional triangular boxes (private collection).



Figure 30. Flower basket made with willow's wood (private collection).

During the 20th century, Lorvão kept its place as the Portuguese Capital of Toothpicks, but toothpicks began to be made by machines that used poplar (*Populus* sp.), plane tree (*Platanus* sp.) or acacia (*Acacia* sp.) woods (Silva 2000) and in the 21st century, factories began to import toothpicks from China and packed them. The tradition of handmade toothpicks did not disappear in Lorvão, and many people still know how to carve them. Nevertheless, this activity lost its economic relevance, and toothpicks are now seen more as a cultural symbol than an economic asset. In 2016, this new status was recognized, when Lorvão toothpicks were include in the Portuguese Inventory of Cultural and Immaterial Heritage [Notice 70/2016] a decision made to highlight their cultural value and contribute to their safeguard [4]. Recently, in several international food fairs and competitions, such as in the European Food Gift Challenge of 2021 and 2022, the toothpicks were awarded for their quality and for the story they tell [5, 6]. In 2024, a new interpretation center devoted to their history, is planned to open in Lorvão.

#### **Declarations**

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#### Literature cited

Antunes T. 2013. Lorvão: Um Mosteiro e um Lugar. PhD Dissertation, Coimbra, Portugal.

Assumpção T. 1899. As Freiras de Lorvão (Ensaio de Monographia Monástica]. França Amado, Coimbra, Portugal.

Borges N. 1977. O Mosteiro de Lorvão. EPARTUR, Coimbra, Portugal.

Brütt F, Cunha M. 1902. A Arte e a Natureza em Portugal (Volume 1). Emílio Biel & Ca. Editores, Porto, Portugal.

Colaço M. 1913. Palitos de Lorvão. Illustração Portuguesa 364 [February 10th]: 169-173.

DGEMN. 1960. Mosteiro de Lorvão. Boletim da Direcção Geral dos Edifícios e Monumentos Nacionais. Ministério das Obras Públicas, Lisboa, Portugal.

Griggs P, Prendergast H, Rumball N. 2000. Plants + people – An Exhibition of Items from the Economic Botany Collections in Museum No. 1. Centre for Economic Botany. Royal Botanic Gardens, Kew. UK.

Piel J. 1982. Sobre a Origem do Nome do Mosteiro de Lorvão. Biblos 57: 170.

Secco A. 1853. Memoria Historico-Chorographica dos Diversos Concelhos do Districto Administrativo de Coimbra, Imprensa da Universidade, Coimbra, Portugal.

Silva P. 2000. Os Palitos na Freguesia de Lorvão – da Manufactura à Manquinofactura. Edições Minerva, Coimbra, Portugal.

Silva P. 2015. Teresa de Portugal. Município de Penacova, Penacova, Portugal.

## Websites [March 4th 2024]

- [1] Book of Revelation from Lorvão Monastery https://digitarq.arquivos.pt/details?id=4381091
- [2] UNESCO's Memory of the World Programme www.unesco.org/en/memory-world/about
- [3] Programa Saber Fazer [Palitos de Lorvão] https://programasaberfazer.gov.pt/arte/palitos-de-lorvao
- [4] Portuguese Inventory of Cultural and Immaterial Heritage

www.matrizpci.dgpc.pt/MatrizPCI.Web/InventarioNacional/DetalheFicha/412?dirPesq=1

- [5] European Food Gifts 2021 https://igcat.org/world-food-gift-challenge/european-food-gifts-2021/
- [6] European Food Gifts 2022 https://igcat.org/world-food-gift-challenge/world-food-gifts-2022/