Ethnobotany in a “Masterpiece of the Oral and Intangible Heritage of Humanity”: Plants in “la Patum” Festivity (Berga, Catalonia, Iberian Peninsula)¹

M. Carme Barceló², Elisenda Butí³, Airy Gras^{2,4}, Maria Orriols², and Joan Vallès^{*,2,5}

²Laboratori de Botànica (UB), Unitat associada al CSIC, Facultat de Farmàcia i Ciències de l’Alimentació, Universitat de Barcelona, Avinguda de Joan XXIII 27–31, 08028 Barcelona

³Institut Pere Borrell, Carrer de les Escoles Pies 46, 17520 Puigcerdà

⁴Institut Botànic de Barcelona (IBB, CSIC-ICUB), Passeig del Migdia s.n., Parc de Montjuïc, 08038 Barcelona, Catalonia, Spain

⁵Secció de Ciències Biològiques, Institut d’Estudis Catalans. Carrer del Carme 47, 08001 Barcelona

*Corresponding author, joanvalles@ub.edu

Key Words: *Clematis vitalba*, ethnobotany, festivity plants, intangible cultural heritage, Patum.

Introduction

Ethnobotanical literature is, in general, very abundant in Europe, where it is mostly focused on plants related to human and, to a lesser extent, animal health, i.e., medicinal and food plants (Gras et al. 2019; Pardo-de-Santayana et al. 2013). Plant uses other than those mentioned are also addressed, but their study is less frequent in this area, at least in part due to the erosion

¹ Received 2 April 2019; accepted 6 July 2019.

of folk plant knowledge, which is more extensive regarding those uses that are not so fundamental as opposed to those directly concerning wellness (Gras et al. 2016). A relevant part of the non-medicinal and non-food uses is constituted by those that are ritual (including the terms ceremonial, magic, religious, or magico-religious, and associated either with beliefs or practices), comprising both the manipulation of plants and simply their ornamental role during an activity (Geng et al. 2017). In some territories (three in Catalonia, two in the Balearic Islands) of the Catalan linguistic area, in which the present work is framed, we have recorded 152 plant taxa with this type of use (Gras et al. 2016), and no less than 14 species, these accounting for more than 11% of the 125 non-food and non-medicinal plants, have been reported in a small Catalan area (Gras et al. 2019). In many cases, decorative plants are associated with religious festivities, often with an older tradition and pagan components (Haeckel 2008; Jiménez-López et al. 2016).

In 2001 The United Nations Education, Science and Culture Organization (UNESCO) initiated the recognition, through the inscription in the World heritage list, of some patrimonial immaterial elements as masterpieces of the oral and intangible heritage of humanity, comprising a panoply of sociocultural phenomena, often with a ritual component (Nas 2002). “La Patum,” a popular feast in the city of Berga, in which plants with ritual uses play a relevant role, was selected in 2005 for this mention. The extensive literature available on “la Patum” either does not mention the involvement of plants in the feast or has not gone into any depth about it (e.g., Felipó 2005; Mascarell et al. 2014; Rumbo 2001). For this reason, the present work is intended as a study of the plants linked to this folk cultural event, including their selection, collection, and cultivation, as well as their tangible and intangible uses, in order to assess the role (and its

conservation) of plants in a relevant, internationally recognized piece of traditional immaterial heritage.

Materials and Methods

Study Area

Berga is a municipality, head of the Berguedà district (in Catalan “comarca”), with 16,199 inhabitants in 2018 (Institut d’Estadística de Catalunya 2019a). It is located in the central part of the Catalan northern third (Fig. 1), in the Catalan Prepyrenean area, at around 700 masl, close to the Llobregat river, the source of which is in the same district, 35 km northeast of Berga. Its landscape is basically that of the montane zone, with *Pinus sylvestris* L. as the dominant tree and *Fagus sylvatica* L. occupying the shadiest areas (Bovet et al. 1986). As in the whole district, agrosylvopastoral and derived activities are important in the municipality, as well as touristic infrastructures; industry is present (textiles were once important in the area), but nowadays not in a dominating position (Bovet et al. 1986; Institut d’Estadística de Catalunya 2019b).

Fig. 1. Location of Berga.

Brief History and Description of the Feast

“La Patum” is a feast celebrated in the city of Berga over a five-day period once a year, in the week in which the commemoration of Corpus Christi (a Thursday with a variable position either in May or in June) takes place. It seems that originally this religious celebration was established ca. 1330, and that not much later a procession was initiated. The current form of the event is basically exempt of religious connotations (although the religious origins are not denied), and has conserved the most festive parts of the original Catholic ritual (Barceló et al. 2018; Felipó 2005). The word *patum* has, in the Catalan language, the proper meaning of a fabled animal associated with this feast (an eagle, incorporated into the Corpus celebration in 1785 by the municipal council; Felipó 2005) and the figurative meaning of a famous and relevant person, often with a pejorative nuance (Institut d’Estudis Catalans 2007). Even if the eagle is probably the most emblematic element of the festival, the term *patum*, derived from *pota* (leg) with a vocalic dissimilation, refers to the set of legs of a kicking mule, which is another element of the feast (Coromines 1986). As the week advances, three parades (ceremonial, children’s, and full “Patum”) are developed, with the presence of many elements, among which several people-operated papier mache elements (horse, mule, eagle, giant-headed dwarf, giant) and disguised people (demons) act, with a relevant presence of firecrackers and music (see more information in the festivity’s UNESCO card, UNESCO 2019). Apart from the parades, it is worth mentioning the administrators—four couples married in the year preceding the feast—who represent each of Berga’s four historic neighborhoods and play a formal role in the presidency of the festival.

Methodology

The field work was conducted in 2017 and 2018 (with a complement in 2019 for historical aspects). The method used was a combination of participant observation and focused interviews (Pujadas et al. 2004). On the one hand, two of the authors live in Berga, one of them from her childhood, and another author spent several periods in the town to follow the feast preparation and celebration. On the other hand, ten informants (five women, five men), native to Berga and participating or having participated in the feast or being familiar with it, were interviewed in order to inventory the plants associated with “la Patum” and to know their roles in the celebration. The interviews were performed in Catalan, the common language to interviewers and interviewees. For the interviewees’ informed consent and related aspects, the International Society of Ethnobiology Code of Ethics was followed (International Society of Ethnobiology 2008). Plant vouchers are deposited in the herbarium BCN, of the Centre de Documentació de Biodiversitat Vegetal, Universitat de Barcelona. Nomenclature follows the *Flora Manual dels Països Catalans* (Bolòs et al. 2005) and, for the taxa not present there, The Plant List (2019). Families have been assigned following the APG IV (Angiosperm Phylogeny Group 2016).

To assess whether plants used in “la Patum” are known and employed for other purposes in Berga and nearby, we used the few academic works dealing with ethnobotany of this area (Lozano 2008; Sanmartí 2011; Usles 2011), as well as the first available results of an ethnobotanical exploration in the region where this feast takes place (Orriols 2019).

Results and Discussion

We have recorded the use of 22 plant taxa (five at the genus level, the remaining at specific or infraspecific levels), belonging to 16 families, as used in different aspects of “la

Patum” festival. We have included those employed in the different parades, as well as those exhibited by the administrators, in order to reach all the plant elements of the feast. We did not take into account artificial flowers, which are present in some effigies. The taxa inventoried are presented in Table 1, with the information on their local Catalan popular names, the festival elements to which they are associated, their kind of use, and the indication of uses not related to the feast (at a basic level of medicinal, food, or other), but quoted in the Berguedà (Berga’s district) as well. Some aspects of current plant use in “la Patum” are illustrated in Fig. 2. Complementarily, Fig. 3 illustrates some aspects of the presence of plants in the feast in the past (1999, 1950s, 1947).

Table 1. Plant species uses in “la Patum,” with reference to their uses for other purposes in the Berguedà district.

Family/Species (herbarium voucher)	Local Catalan name	Relevant element of “la Patum”	Use in “la Patum”	Use aside from “la Patum” in the district
Anacardiaceae				
<i>Schinus molle</i> L. (BCN 128265)	Pebrer bord	Giant	Ornamental	
Apiaceae				
<i>Amni majus</i> L. (BCN 76796)	Siscla	Administrator	Ornamental	
<i>Foeniculum vulgare</i> Mill. (BCN 155751)	Fonoll	Administrator	Ornamental	Food, medicinal
Araliaceae				
<i>Fatsia japonica</i> (Thunb.) Decne. et Planch. (BCN 155752)	Aràlia	Giant	Ornamental	
Asparagaceae				

<i>Asparagus umbellatus</i> Link (BCN 155753)	Miroclaudi	Giant	Ornamental	
<i>Dracaena</i> sp. (BCN 155754)	Dracena	Giant	Ornamental	
Asteraceae				
<i>Chrysanthemum</i> sp. (BCN 155755)	Crisantem	Giant	Ornamental	
<i>Gerbera</i> sp. (BCN 155756)	Gerbera	Giant	Ornamental	
Brassicaceae				
<i>Diploaxis erucoides</i> (L.) DC. (BCN 127187)	Ravenissa	Administrator	Ornamental	Animal feed
Caryophyllaceae				
<i>Dianthus caryophyllus</i> L. (BCN 155758)	Clavell	Eagle, giant	Ornamental, symbolic	
<i>Gypsophila paniculata</i> L. (BCN 155759)	Gipsòfila	Giant	Ornamental	
<i>Silene vulgaris</i> (Moench) Garcke (BCN 155760)	Esclafidor embotit (in flower), esclafidor rebentat (in fruit)	Administrator	Ornamental	
Clusiaceae				
<i>Hypericum androsaemum</i> L. (BCN 155761)	Pericó	Administrator	Ornamental	
Euphorbiaceae				
<i>Euphorbia characias</i> L. (BCN 53476)	Lletosa	Giant	Ornamental	

Fabaceae				
<i>Medicago sativa</i> L. (BCN 155762)	Alfals	Demon	Fire protection	Animal feed, medicinal, veterinary
Hydrangeaceae				
<i>Hydrangea</i> sp. (BCN 155763)	Hortència	Giant	Ornamental	
Lauraceae				
<i>Laurus nobilis</i> L. (BCN 150194)	Llorer	Eagle	Ornamental, symbolic, to prevent (externally) smoke effects	Medicinal, food, magicoreligious
Oleaceae				
<i>Olea europaea</i> L. subsp. <i>europaea</i> var. <i>europaea</i> (BCN 155764)	Olivera	Eagle	Ornamental, symbolic	Medicinal, food
Plumbaginaceae				
<i>Goniolimon tataricum</i> (L.) Boiss. (BCN 155757)	Tatàrica	Giant		
<i>Limonium sinuatum</i> (L.) Mill. (BCN 155765)	Estatícia	Administrator, giant	Ornamental	
Ranunculaceae				
<i>Clematis vitalba</i> L. (BCN 150201)	Vidauba	Demon	Fire protection	
Rosaceae				
<i>Rosa</i> sp. (BCN 155766)	Rosa	Giant	Ornamental	Medicinal

Fig. 2. Illustration of some aspects of current plant contribution to “la Patum”: a) eagle; b) giants; c) administrators.

Fig. 3. Historical pictures of “la Patum”: a) giants in the 1950s; b) *Clematis vitalba* (left) and *Laurus nobilis* (right), respectively used for body protection and smoke spread in 1947; c) *Clematis vitalba* used for body protection and smoke spread in 1999.

Clematis vitalba, a Crucial Wild Plant for “la Patum”

The most interesting or original plant in the festivity is a wild species typically known as slightly noxious in external use, which is here used as a protective, not in contact with the skin, but covering most of the body. The *plens* (meaning full, probably because they are full of firecrackers) are people disguised as demons, which constitute the most spectacular part of the feast, when around 100 of them occupy the main square of the town, each of them with nine *fuets*

(firecrackers) that they light and set off. To protect people from getting burned, a wild climbing plant, *Clematis vitalba* L., is used. This is the only plant that does not play an ornamental role in the festivity. In addition to its protective role, someone has also reported its symbolic value, that of representing the plant divinities (Rumbo 2001). Our informants transmitted the idea that *Clematis vitalba* is one of the classical and emblematic plants of “la Patum,” and, as far as they remember—from their parents and grandparents—it has always been present (see Fig. 3 for examples from 20 and 62 years ago, where structures related to this plant are practically identical to those used in 2018, reflected in Fig. 4).

Fig. 4. *Clematis vitalba*’s current contribution to “la Patum,” from collection to protection in the firecracker parade.

Some days before the event, the *vidauba* (a local variant of the more extended folk Catalan name *vidalba*) is collected by municipal agents and transported in a van to the municipal premises called “la Ribera,” where it is deposited until the *plens* are dressed just before their show (Fig. 4). Every person acting as a *ple* is covered entirely with branches and leaves of the *vidauba* to protect him or her from burns that could be caused by the firecrackers. Usles (2011)

also indicates a role of *Clematis vitalba* in absorbing the noise of the firecrackers. In the years in which *Clematis vitalba* is scarce, *Medicago sativa* L. is used to complete the protection, particularly over the person's head.

Another of the Catalan names for *Clematis vitalba* is *herba de les llagues* (ulcer herb), alluding to its aggressiveness in contact with the skin. Furthermore, one of the Spanish names of the species, *yerba de los pordioseros* (beggars' herb), comes from the practice of using this plant to cause injuries to themselves in order to invoke compassion (Font 1961). The informants remark that, in "la Patum," the plant never comes in direct contact with the skin, so that this possible negative effect is avoided.

Variety of Plant Uses in "la Patum"

Ornamental use of plants is the most prevalent. In fact, all but three of the taxa recorded play a decorative role in the ritual context of "la Patum" festivity, whereas two others have, in addition, a symbolic value (see Table 1 and, particularly, the above subheading devoted to *Clematis vitalba*). The eagle used to bear, in ancient times, a rabbit or a pigeon in its beak, representing its nourishment. These animals were substituted later by a plant branch evoking peace, first of *Laurus nobilis* L. and currently of *Olea europaea* L. subsp. *europaea* var. *europaea*. Some 60 years ago, *L. nobilis* used to play a role beyond decoration; its branches were employed to spread the smoke produced by the firecrackers, a use that is not preserved currently. Additionally, the eagle also bears red *Dianthus caryophyllus* L. flowers, for some people symbolic of the drops of blood shed in order to pass from slavery to freedom. Exceptionally, in 2018 (when we took the pictures, Fig. 2), the *Dianthus caryophyllus* flowers employed were yellow, due to a political vindication associated with this color. The predominance of ornamental

plants in rituals is understandable, even more so when the activities are festive. For instance, one quarter of the 32 plant taxa used in rituals (not only festive ones) by the Naxi ethnic group in Yunnan, China, are decorative (Geng et al. 2017). Moreover, in some feasts, all plants used are devoted to decoration (Haeckel 2008; Jiménez-López et al. 2016).

Six out of the 22 taxa recorded (more than one quarter) have been claimed in the Berguedà district for uses, among which medicinal is the most relevant, other than the ornamental one linked to “la Patum” (Table 1). Similarly, in a floral festivity with a religious background in Telangana, India, some of the plants used as ornamentals are quoted as medicinal as well, and are claimed to purify the water where they are immersed (Madhusudhan 2016). This explicit relationship has not been mentioned by our informants, but it is worth mentioning that a number of these ritual plants are appreciated as well for other uses in the region.

Wild and Cultivated Plants

Cultivated plants predominate (13 out of 22, almost 60%) among the plants present in “la Patum” festival. This is not surprising, since many of them are used for preparing bouquets to be borne by some elements of the feast such as giants, where plants quite homogeneous in size, resistant, and not easily fading are needed, characteristics that are common in garden plants. These bouquets are prepared as handicrafts by local florists, and the plants they contain, including some wild ones, may vary over the five days of the feast (i.e., not all the cultivated plants quoted in Table 1 are present every day).

Cultivated ornamental plants are very often present in human lives and activities, and “la Patum” festivity is no exception. The presence of nine wild species in a folk celebration is, in contrast, remarkable, because it is not so frequent. These plants play a relevant role, apart from

the already addressed protagonist role of *Clematis vitalba*, in the representation of the four classical neighborhoods of the town, each of them having a plant: *Foeniculum vulgare* Mill. (substituted with *Ammi majus* L. if in the dates in which the feast is celebrated the plant is not available), *Diploaxis eruroides* (L.) DC. (replaced, if not available, with *Hypericum androsaemum* L.), and *Silene vulgaris* (Moench) Garcke. The last species is used, with different names and phenological status (*esclafidor embotit* when it is in flower; *esclafidor rebentat* when it is in fruit), in two neighborhoods.

Concluding Remark

Although “la Patum” is a well-known local and national event, having, in addition, the international recognition of a “Masterpiece of the Oral and Intangible Heritage of Humanity,” the relevance of both wild (one of which with a particularly relevant role) and cultivated plants in the festival’s development, well beyond that of an ornamental function, had not been highlighted. This shows the vitality, even in industrialized countries, of plant use in all human activities, including the ritual and festive ones. It also indicates that the intangible cultural heritage, to which “la Patum” belongs, includes plants as significant tangible elements. Festivities are important activities in all human societies, being included among the most preserved traditions. These traditions include plant uses beyond the more common ones—medicinal, food, and others. This is why examples such as “la Patum” are important for the conservation of traditional plant knowledge and management in the interface of material and immaterial culture.

Acknowledgments

The authors wish to thank Alfons Alsina “Palleco,” Besora Sans family, Albert Bres, Ramon Felipó, M. Teresa Pajerols, Carme Prat, and Floristeria “El Vall” for their information, M. Teresa Pajerols, once again, for furnishing old pictures from the festivity, Teresa Garnatje for critically reading the first version of the manuscript, Roser Guàrdia for literature information, and Samuel Pyke for the English language revision. This work was supported by projects 2017SGR1116 from Generalitat de Catalunya (Catalan government) and PRO2017-S02-VALLES from the Institut d’Estudis Catalans.

Authors’ Contributions

The five authors took part in the field work, with participant observation by EB, MCB, and MO. Pictures of Figs. 2 and 4 were taken by EB and MCB. MCB, AG, and JV wrote the first version of the manuscript. All the authors read and modified the manuscript, and approved its final version. The authors declare that they have no competing interests.

Literature Cited

Angiosperm Phylogeny Group. 2016. An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG IV. *Botanical Journal of the Linnean Society* 181(1): 1–20.

Barceló, M. C., E. Butí, and J. Vallès. 2018. La Patum, patrimoni de la humanitat. Les plantes que intervenen a la festa. *L’Erol* 138: 59–61.

Bolòs, O. de, J. Vigo, R. M. Masalles, and J. Ninot. 2005. *Flora manual dels Països Catalans*. 3rd ed. Barcelona: Pòrtic.

- Bovet, M. T., M. Lapuerta, C. Solé, and M. Roca. 1986. El paisatge del Berguedà: Una proposta de divisió funcional. *L'Erol* 18: 15–29.
- Coromines, J. 1986. Diccionari etimològic i complementari de la llengua catalana. Volume VI, O–QU. Barcelona: Curial Edicions Catalanes, Caixa de Pensions “la Caixa.”
- Felipó, R. 2005. *La Patum. El Corpus Christi de Berga*. Tarragona: El Mèdol.
- Font, P. 1961. *Plantas medicinales. El Dioscórides renovado*. Barcelona: Labor (12th ed., 1990).
- Geng, Y., G. Hu, S. Ranjitkar, Y. Shi, Y. Zhang, and Y. Wang. 2017. The implications of ritual practices and ritual plant uses on nature conservation: A case study among the Naxi in Yunnan Province, Southwest China *Journal of Ethnobiology and Ethnomedicine* 13:58.
- Gras, A., T. Garnatje, M. À. Bonet, E. Carrió, M. Mayans, M. Parada, M. Rigat, and J. Vallès. 2016. Beyond food and medicine, but necessary for life, too: Other folk plant uses in several territories of Catalonia and the Balearic Islands. *Journal of Ethnobiology and Ethnomedicine* 12:23.
- , G. Serrasolses, J. Vallès, and T. Garnatje. 2019. Traditional knowledge in semi-rural close to industrial areas: Ethnobotanical studies in western Gironès (Catalonia, Iberian Peninsula). *Journal of Ethnobiology and Ethnomedicine* 15: 19.
- Haeckel, I. B. 2008. The “Arco Floral”: Ethnobotany of *Tillandsia* and *Dasyllirion* spp. in a Mexican Religious Adornment. *Economic Botany* 62(1): 90–95.
- Institut d'Estadística de Catalunya. 2019a. <https://www.idescat.cat/emex/?id=080229> (17 February 2019).
- . 2019b. <https://www.idescat.cat/emex/?id=080229#h7f80000000> (17 February 2019).
- Institut d'Estudis Catalans. 2007. *Diccionari general de la llengua catalana*. 2nd ed. Barcelona: Edicions 62, Enciclopèdia Catalana.

International Society of Ethnobiology. 2008. International Society of Ethnobiology Code of Ethics (with 2008 additions). <http://ethnobiology.net/code-of-ethics> (22 February 2019).

Jiménez-López, D. A., I. A. Trejo-Cruz, and E. Mó. 2016. Uso ceremonial de bromelias epífitas en Las Margaritas, Chiapas, México. *Desde el Herbario CICY* 8: 193–198.

Lozano, P. 2008. Treball etnobotànic de Gironella. Economic Botany course academic work, Universitat de Barcelona.

Madhusudhan, L. 2016. Floral festival: A culture of Telangana. *Arts and Social Sciences Journal* 7: 5.

Mascarell, M., A. Requejo, M. Llorens, and A. Rumbo. 2014. La Patum, primera declaració de Patrimoni Immaterial de la UNESCO a Catalunya, deu anys després. *Revista d'Etnologia de Catalunya* 39: 134–141.

Nas, P. J. M. 2002. Masterpieces of oral and intangible culture. Reflections on the UNESCO World Heritage List. *Current Anthropology* 43(1): 139–143.

Orriols, M. 2019. Primera aproximació etnobotànica al Berguedà. Undergraduate research work, Universitat de Barcelona.

Pardo-de-Santayana, M., A. Pieroni, and R. K. Puri, eds. 2013. Ethnobotany in the new Europe. People, health and wild plant resources. *Environmental Anthropology and Ethnobiology* (Vol. 14). New York-Oxford: Berghahn Books.

Pujadas J. J., D. Comas, and J. Roca. 2004. *Etnografia*. Barcelona: Universitat Oberta de Catalunya.

Rumbo, A. 2001. *Patum!* Barcelona: Amalgama.

Sanmartí, E. 2011. Estudi etnobotànic de Sant Julià de Cerdanyola. Economic Botany course academic work, Universitat de Barcelona.

The Plant List. 2019. www.theplantlist.org (22 February 2019).

UNESCO. 2008. <https://ich.unesco.org/en/RL/patum-of-berga-00156> (22 February 2019).

Usles, E. 2011. Estudi etnobotànic de l'Alt Berguedà. Economic Botany course academic work, Universitat de Barcelona.