

Notes on Economic Plants

Traditional Craft Techniques of Esparto Grass (*Stipa tenacissima* L.) in Spain¹

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Introduction

Esparto grass (*Stipa tenacissima* L.) (Poaceae) is a perennial plant with hard and linear leaves that are grouped in fascicles sprouting in the spring. Scapes can reach 1 meter in height. The fruit is a small grain with a long twisted spiral awn. It grows in clumps grouped in relatively dense formations (Spanish *espartizales*) in dry or semiarid Mediterranean areas (rainfall between 200–400 mm/year), often in poorly developed soils on limestone, from 0 to 1,000 m. above sea level. *S. tenacissima* is an endemic plant of the Western Mediterranean region (Barreña et al. 2006). The systematic diversity within esparto grass species has been controversial since the first century CE regarding the varying quality of this natural product as a material for ropes and basketry. Two species, *S. antiatlantica* and *S. tenacissima*, as well as two subspecies, *S. tenacissima* subsp. *tenacissima* and *S. tenacissima* subsp. *gabesensis*, are recognized as North African, while in Europe (Spain and Portugal) there is only the *S. tenacissima* subsp. *tenacissima* (Barreña et al. 2006). In Spain, the esparto grasslands cover a surface area of 408,578 ha, including both wild and cultivated lands. It is very difficult to know what is “natural” or planted, as esparto plantations date back many centuries, and official data do not distinguish between wild or planted esparto grasslands. It is important to note that in 1968 the surface area was calculated at 684,000 ha, which demonstrates a significant recent decline in esparto grasslands. This corresponds in time to the decline in esparto manufacturing and changes to the rural economy (MMA 2002). Although esparto is a native plant, it is important

to note that this species has been managed and planted by humans over the centuries. Thus, its range and distribution is intricately linked to human interactions (Bañón 2010).

Numerous archaeological artifacts and remains of esparto basketry have been discovered that date from the Neolithic period and onwards in southeast Spain. These pieces demonstrate high standards of quality compared with more modern pieces. In addition, there are many imprints of esparto basketry in clay or pottery (Ayala and Jiménez 2007). Among the abundant archaeological remains, some of the most outstanding are the artifacts dating back to 7,200–6,600 BP, which were found with several mummies in Cueva de los Murciélagos (Granada). These pieces represented clothes, hats, tunics, sandals, baskets, and ropes—all made with the finest techniques. In some cases, the artifacts included colored espartos (Cacho et al. 1996; Castellote 1982).

After the Spanish Civil War, during the autarky economic period of the Franco government (1939–1975), esparto was named as Spain’s national fiber. In 1948, the National Service of Esparto was created, which worked to promote and regulate the harvest and esparto market. The opening of markets to other fibers like jute and the arrival of plastics marked the decline of the esparto market in the 1960s. During the Franco government, several Spanish towns, such as Cieza (Murcia), Hellín (Albacete), and Jódar (Jaén), were dependent on the production of esparto products as the main source of jobs and incomes (Álvarez 2005).

During the second half of the twentieth century, Spain suffered a socio-political and cultural change that included the abandonment of rural areas for big cities. This resulted in a loss of many popular



Fig. 1. Plaits: (1) *Pleita*, wide plait with raw esparto, the commonest technique. (2) The hand positions are very important to weave the plait correctly. (3) *Recincho*, a braid made with crushed esparto (photos, José Fajardo).

traditions linked to the world of agriculture and livestock. As Spanish society became more technological, synthetic materials such as plastics replaced esparto and other vegetable fibers used to manufacture goods for domestic and agricultural use. These social drivers resulted in a loss of traditional knowledge related to esparto grass. Currently there are a few small industries in which esparto grass is used as a raw material, such as for the manufacturing of scouring pads and the application of plaster for construction. Esparto basketry remains in use mostly as a hobby, practiced by retired people who share a passion for the art form and the historical significance. Esparto artifacts have lost their former role in countryside life and are more commonly seen in homes as decoration versus utility.

Currently there are just a handful of elders who still live in the mountain villages practicing what remains of an ancient esparto culture. These

techniques have been transmitted orally from the times of antiquity, a system of knowledge transmission that is endangered today. The aim of this work is to document techniques and forms of basketry made from esparto grass in Spain. The craft has historic and ecological significance to the region of southern Spain and there are only a handful of people who still know and practice the art of esparto.

Methodology

Data were recorded in southeastern and central Spain from 1994 to 2014, through semi-structured interviews carried out with various people in rural areas. Annual workshops provided an opportunity to conduct interviews and also document the craft in the way that esparto

TABLE 1. PLAITS.

Technique	Spanish Names	Esparto Kind	Strands
Plait or Braid	<i>Recincho, crineja, cerneja, collazo</i>	Crushed	5, 7, 7 in 5, 9, 11
Wide Plait or Braid	<i>Pleita, empleita, lata, pleita</i> <i>quesera</i> (variation)	Raw	9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31

TABLE 2. OTHER BASKETRY TECHNIQUES.

Technique	Spanish Names	Esparto Kind	Strands
<i>Coiled basketry</i>	<i>Cosido, punto de colmena, punto de ojal (variation)</i>	<i>Raw, crushed</i>	1
<i>Cofin braiding</i>	<i>Punto de cofin (parao o embutido), esparto enredado</i>	<i>Raw</i>	3
<i>Cofin braiding of 5 strands</i>	<i>Recinchillo</i>	<i>Raw</i>	5
<i>Snail basket braiding</i>	<i>Punto de caracolera</i>	<i>Raw</i>	3
<i>Stake and strand, twining</i>	<i>Esparto en rama, en peine, filete</i>	<i>Raw</i>	—

culture has been shared historically. Traditional learning about esparto basketry has been based primarily on oral transmission and hands-on interactions, both from parents to children and between unrelated people. We selected 26 informants (22 men, 4 women), who represented artisans dedicated to esparto basketry, and whose knowledge served to document braiding techniques, processes, and vocabulary.

Results and Discussion

TECHNIQUES OF ESPARTO BASKETRY

In the past, younger shepherders would learn from the elder shepherd by practicing weaving

techniques while they were herding in the fields. Peasants used to weave esparto when it would rain, taking advantage of this free time to arrange tools and work on projects. In summertime, after the hottest hours of the afternoon, people would go outside of their homes, al fresco, talking and weaving esparto. These moments represented a learning opportunity for sharing skills, knowledge, and techniques.

In Spanish tradition, the main way to use esparto for basketry is raw and crushed. Basketry techniques are not specific to one plant species. In Spain, there are many different plants used in basketry, depending on the environment and region, but no other species is comparable to esparto with regards to maximum diversity in techniques and items made with it.



Fig. 2. Other techniques. (1) *Cofin* braiding of 3 strands. (2) *Cofin* braiding of 5 strands. (3) Coiled esparto. (4) Twining basketry (photos, José Fajardo).



Fig. 3. Different ways to begin a wide plait (photo, José Fajardo).

The finest esparto artisans carefully select their esparto leaves, discarding the rotten leaves and always using leaves with the same size and diameter. The best esparto is that which comes from burned plants. Years ago, this was the way to obtain good raw material from aged plants (according with the National Service of Esparto, this plant can live for more than 75 years). Our informants could clearly distinguish among fine works and rough works of esparto craftsmanship. In some cases, people use colored esparto; examples of this date back to the Neolithic period (Cacho et al. 1996). Another way to dye esparto is to put it in a closed space with sulfur fumes; the esparto becomes a very pale whitish–yellowish.

A sign of quality in works with raw esparto is to see all the leaves parallel, of the same size, and without any leaves crossing over the other. In the finest pieces, the leaf tips are eliminated and the sewing threads are always hidden inside the plaited edge. The number of esparto leaves in every strand also defines the quality and size of the work. For a wide plait you never use less than three leaves per

strand. In addition, it is important to know how to place the fingers to weave the different strands in the plait (Fig. 1).

Typically, to plait esparto, people sit down with a handful of esparto leaves in their left armpit. To weave a long strip of plait, people sit over the plait, stretching it and taking out the work from its back. To work with raw esparto, people have to soak it for a few hours by immersing it in water or wrapping it in a wet cloth.

There are different techniques for the final configuration of the various crafts. Some are based on weaving a strip of plait, which has to be sewn edge to edge (Table 1, Fig. 1). Mainly, there are two groups of plaiting techniques—using raw esparto (*pleita*) or using crushed esparto (*recincho*). Formerly, the sewing string was also made with esparto with two or three strands. Each technique has a name for the number of strands woven plus the name of the technique. Some common examples are *pleita de 15* or *recincho de 7* (plait of 15 strands or braid of 7 strands). To achieve the final piece, using strips of plait the artisan sews this plait in different ways, using a special needle formerly

TABLE 3. COMPLEMENTARY TECHNIQUES.

Technique	Spanish Names	Esparto Kind	Strands	Uses
Braid	<i>Guita, lía, tomiza, trenza, vencejo</i>	Raw, crushed	3	Ropes to harvest cereals, chair seats, sewing thread
Cord edging	<i>Ribete de cordón</i>	Crushed	3	For ending baskets
Crown sinnet	<i>Castillo</i>	Crushed	4 ropes	Just for handles
Five strands braid	<i>Soguillo de 5</i>	Crushed	5	Endings, handles
Four strands braid	<i>Rabogato</i>	Crushed	4	Endings, handles
Grafting	<i>Injerto</i>	Plait of raw esparto	—	This technique hide the beginning and the end of the sewed plait
Point	<i>Picos, puntas</i>	Raw	—	Ornament for baskets, animals (lizards)
Shepherd spoon	<i>Cuchara de pastor</i>	Raw	—	A provisional spoon to eat in the field
Square braid	<i>Soguillo de 8</i>	Crushed	8	Handles
String	<i>Cosedera, cordelillo</i>	Crushed, raw	2, 3	To sew pieces, handles, sandals, toy lizards

TABLE 4. MAIN TRADITIONAL BASKETRY PIECES OF ESPARTO.

Artifact	Spanish Name	Techniques	Uses
Basket	<i>Cesta</i> (2 handles), <i>cesto</i> (1 handle)	Plaited, sinnet, stitched coiled, cross warp, twining	To carry crops, food, etc.
Beehive	<i>Vaso, colmena</i>	Coiled	Beekeeping
Belt	<i>Cincha, atarre</i>	Several	For horses, mules, and donkeys
Bottle and container covers	<i>Forrado de garrafas y botellas</i>	Plaited, sinnet, twined, cross warp, etc.	To keep cooler water and wine, to protect glass recipients
Canteen	<i>Calabaza</i>	Coiled	Waterproofed with pine tar
Chair seat	<i>Enguitado de sillas</i>	Braid, string	In different ways and designs, to weave the seat of wooden chairs
Cheese mold	<i>Pleita quesera, cincho</i>	Plaited	A strip of plait use as traditional mold for Manchego cheese
Contraceptive	<i>Baleillo</i>	Plaited	Small round rug tied to the back of rams to avoid the pregnancy of sheep
Covered basket	<i>Barja, capacha, cachumbo</i>	Plaited	To keep tools, specially knives for pig slaughter
Donkey pannier	<i>Serón</i>	Plaited	To harvest crops, fodder, etc.
Dough basket	<i>Escriño</i>	Coiled	To take the dough to the oven
Espadrilles	<i>Esparteñas</i>	Several	Old traditional footwear in the countryside
Fan	<i>Soplillo</i>	Plaited	To stir up fire
Ferret basket	<i>Huronera</i>	Coiled	To take the ferret to the field for hunting rabbits
Fishing net	<i>Red</i>	Cross warp	For fishing
Fish trap	<i>Nasa</i>	Cross warp	Used as a trap to fish in the rivers
Fodder basket	<i>Cebero, remental, sarrieta</i>	Plaited	To feed animals, specially mules and horses
Hat	<i>Sombrero</i>	Several	To protect the head
Long rug	<i>Estera</i>	Plaited	Rug
Net	<i>Red, jarpil</i>	Cross warp	For fishing, to carry straw in the cart
Oil mill basket	<i>Capacha, cofin</i>	Cross warp	To pressing the olive pulp separating the liquids from the solids
Pitcher pannier	<i>Aguaderas</i>	Plaited	To take water home
Round rug	<i>Baleo, magual</i>	Plaited	Rug, dustpan
Saddle	<i>Montura</i>	Plaited	For donkeys, mules, and horses
Saffron basket	<i>Cesto rosero</i>	Plaited	To collect saffron flowers
Shepherd spoon	<i>Cuchara de pastor</i>	Twining basketry	Provisional spoon to eat curd in the field (shepherds)
Shutters	<i>Persianas</i>	Plaited	To keep the home fresh
Shepherd's Slings	<i>Honda</i>	Braid	In ancient times, it was a weapon. Also, it was used by herders to run their animals
Snail basket	<i>Caracolera, cachulera, cernacho</i>	Snail basket stitch	To catch snails
Sowing basket	<i>Sembradora</i>	Plaited	For sowing cereals by hand
Stool	<i>Posete, posón</i>	Plaited	Like a seat
Swarm catcher	<i>Jabardero</i>	Plaited	To catch bee swarms
Table mat	<i>Salvamanteles, tiznero</i>	Several	To protect the table from hot pans
Toys and ornaments	<i>Juguetes y adornos; lagartos, cabezas de toro o de burro, etc.</i>	Several	To provide toys for children and as home ornaments
Muzzle	<i>Bozal, bozo</i>	Crushed	For mules

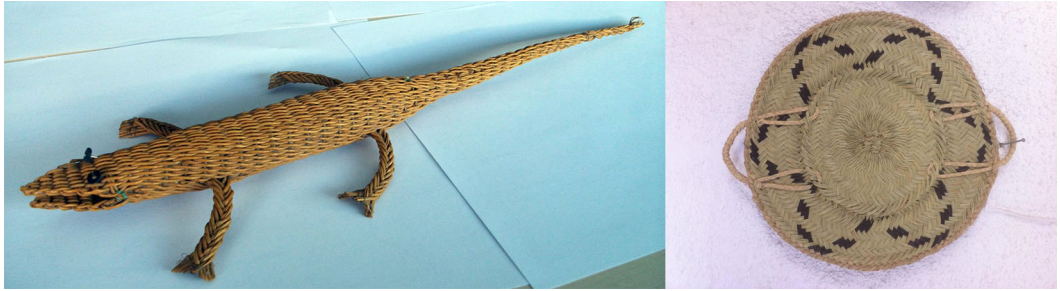


Fig. 4. Left, esparto lizard, a toy for children (work of Eliécer García). Right, round rug (*baleo*) “grafted” (work and photo, Antonio Gómez).

made with an old sickle or from carved hardwood. In other techniques, the artifact is woven directly in one piece (Table 2, Fig. 2). For the same technique, there are several variations that include different ways to start the plait (Fig. 3).

There are specific techniques just to make one artifact. For example, there is a unique

stitch applied to weave a snail basket used to collect snails. Or shepherds would weave a provisional spoon used to eat curd made from goat milk (and curdle with spurge milk) known as a “shepherd spoon” by weaving a handful of raw esparto leaves. In finishing the piece, some complementary techniques are



Fig. 5. Some esparto pieces. (1) Espadrilles. (2) Wrapped bottle gourd (work and photo of Alfonso Mansanet). (3) Don Quixote and Sancho, esparto miniatures (work of Alfredo Martínez). (4) Old swarm catcher (photo, Juan Antonio Martínez). (5) Snail basket (photo, José Fajardo).

used, such as handles, edgings, and ornaments (Table 3). These examples demonstrate the specific techniques used to make very specialized baskets and tools.

In Spanish, *cofin* refers to the shallow baskets used to press the olive mass in the mill to obtain olive oil. This word comes from the Latin *coph nus*, and is linked to the Greek κ *φινος*, meaning a shallow basket (DRAE 2014).

MAIN ESPARTO BASKETRY PIECES

Most craft tools and artifacts for farming and livestock in Spain (especially in southern regions) were made with esparto, such as containers/sacks for carts, horses and donkeys, harvesting baskets, and items for the home. There is a huge variety of items (Table 4), many of which are well known and have a specific use, but others are the product of a special personal need or a free creation, such as toys for children or animals (Fig. 4). Every kind of basket has a special name that describes its use. For example, a *caracolera* is a basket used traditionally to gather snails (Fig. 5).

There is a rich Spanish vocabulary linked with esparto artifacts. Very often, the same piece receives different names, changing with the region. Mainly, this vocabulary belongs to the Castilian and Catalan dialect of Valencia.

In conclusion, esparto grass is an outstanding plant in Spanish ethnobotany due to its cultural and economic importance. “Esparto culture” is not just about basketry, even though there is a rich diversity of techniques and forms. It is a cultural heritage of the rural people who farm, forage for wild foods, and tend animals. This project is a dynamic and interactive effort to document the cultural uses of esparto and to sustain this rich heritage that is deeply connected to the esparto landscape.

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