



# Magical and Popular Veterinary Uses of Rue (*Ruta* L., Rutaceae) by Shepherds in Eastern Spain

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## Research

### Abstract

Rue is a plant of Mediterranean origin which is widely used by shepherds to protect the sheep. *Ruta chalepensis* L. and *Ruta angustifolia* Pers. are the species studied in this context. This article documents the popular veterinary uses of rue as well as the importance this plant has in the shepherd world as a protector against witches, evil eye, and other evils, underscoring the protection strategies employed to fight these evils that have so concerned caregivers of herds. Semi-structured interviews of veteran shepherds are the basis of this paper.

### Resumen

La ruda es una planta de origen mediterráneo muy utilizada por los pastores de ganado lanar para proteger a las ovejas. *Ruta chalepensis* L. and *Ruta angustifolia* Pers. son las especies estudiadas en este contexto. Este artículo recoge los usos veterinarios tradicionales de la ruda, pero sobre todo la importancia que esta planta tiene en el mundo pastoril como protectora contra brujas, el mal de ojo y otros males, subrayando las estrategias de protección empleadas para combatir estos males que tanto han preocupado a los cuidadores de los rebaños. Entrevistas semi-estructuradas a pastores veteranos son la base de esta investigación.

### Introduction

Rue is a Mediterranean plant, native to dry, sunny environments, and has been used for medicinal purposes since ancient times. Mentioned in the *Odyssey* as a talisman to fend off the sorceress Circe, it was cited due to its medical uses by Roman authors such as Galen, Pliny the Elder, and Dioscorides (Pollio *et al.* 2008). Its use in the Middle

Ages is documented by Paracelsus, Agrippa of Nettesheim, and the Pícara Justina (Lara Alberola 2010). It is associated more historically with its magical effects and its use by witches and faith healers than with its medicinal effects. Its current popular medical use is very intense. There is an extremely rich tradition on its applications for the most diverse conditions (Pellicer 2000, San Miguel 2003) which makes it a plant of mandatory use in local pharmacopoeia. Among its alternative uses, it has been highlighted as a clandestine abortifacient with severe risk for the life of the woman. It is widely used in Mediterranean countries (González-Tejero *et al.* 2008) although it has a strong presence in Latin America and in other places associated with the export of Hispanic customs (Lans 2007, Rodríguez Quezada 2011). Rue has components of great interest for contemporary medicine (e.g., as an anti-inflammatory and an analgesic) which is why it is the subject of numerous scientific studies and is in regular use in clinical trials (Ratheesh *et al.* 2010).

As has been noted, rue's ancient use was as a repellent against witches and their powers, and considerable con-

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temporary use has been observed among faith healers. Thus, its use has been incorporated by Latino faith healers in New York (Balick *et al.* 2000) as well as by Ecuadorian patients in Germany (Wessner *et al.* 1999) who used it for purposes related to magic.

However, its veterinarian uses have not been studied much in the scientific literature in spite of its abundant and widespread use in the Spanish territory, mainly by sheep herders. The uses of this plant are presented here from a strictly veterinary standpoint, including popular tradition. In addition, we discuss other remedies that combine veterinary practices with other practices used by faith healers. Finally, we present the magical uses of this Mediterranean plant related to sheep livestock.

## Methods

Semi-structured interviews using a previously prepared script were used to obtain data. This work was based in the context of another study of Mediterranean shepherds led by the authors (see Vidal-González 2013). The specific aim of this work was to obtain and organize information on traditional shepherding practices. The fieldwork was carried out in the interior areas of the provinces of Castellón, Teruel, and Valencia, Spain, where sheep farming is one of the main economic resources. For the interviews we searched for older shepherds in order to investigate the traditions on the use of rue (Table 1).

In addition to the interviews, we consulted literature on shepherd culture and ethnoveterinary culture. This literature has been published locally and in a dispersed, isolated manner which hindered working with it. The published literature along with citations of rue use from other places was analyzed alongside data from the interviews.

Two plants were studied, *Ruta chalpensis* L. (VAL 223179) and *Ruta angustifolia* Pers. (VAL 220763). Voucher speci-

mens used for interviews were deposited at Herbari, Jardí Botànic, Universitat de València, València, Spain (VAL).

## Results

Eleven interviews were conducted, with an average age greater than 70 years and a range of 55 to 79 years. The collection of information was difficult since in rural areas the traditional uses of rue are associated with clandestine abortions and thus often associated with the death of women and subsequent justice. Furthermore, rue was used for practices that some might call magical or superstitious, making it difficult for informants to admit to these practices. As we were told by informant 11: "It is not hard to try." Or by informant 10: "I heard something about this use of rue."

The majority of informants (9 of 11) practiced veterinary rue use in the first person, some out of conviction, but mainly due to arguments such as "just in case," "I have been told that," or "it doesn't hurt to try." For this reason, and in order to preserve anonymity, our records avoid identifying the people interviewed for this study. Contrary to the normal format of this journal, original interview results are inserted within the discussion below and noted as quotes by informants.

### Veterinary uses

Rue is well-known due to its dilating effects on the uterus, hence its wide use to facilitate childbirth and to provoke abortions. This is why shepherds have also followed these practices in treating ruminants, first to promote labor in sheep and goats and then to cause postpartum placental expulsion as well as to clean mothers after labor. Pallaruelo (1988:186) points out its frequent use by shepherds in the Pyrenees of Huesca. Its use has also been documented among the shepherds of Andorra as Niell and Agelet indicate (2011:202). In Extremadura, if there

**Table 1.** Demographics of informants interviewed regarding uses of rue (*Ruta* L.) in sheep herding in eastern Spain.

| Informant | Age | Village and Province           | Former Occupation |
|-----------|-----|--------------------------------|-------------------|
| 1         | 67  | Riodeva, Teruel                | Shepherd          |
| 2         | 75  | Navarrés, Valencia             | Shepherd          |
| 3         | 75  | Terriente, Teruel              | Shepherd          |
| 4         | 67  | Cuevarruz, Alpuente, Valencia  | Shepherd          |
| 5         | 79  | El Collado, Alpuente, Valencia | Shepherd          |
| 6         | 73  | El Collado, Alpuente, Valencia | Shepherd          |
| 7         | 72  | Cortes de Arenoso, Castellón   | Shepherd          |
| 8         | 75  | Caudiel, Valencia              | Shepherd          |
| 9         | 79  | Linares de Mora, Castellón     | Shepherd          |
| 10        | 55  | Puebla de San Miguel, Valencia | Shepherd          |
| 11        | 70  | Mas del Olmo, Valencia         | Shepherd          |

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are complications during labor, small doses of rue, hedge mustard, and ergot (Domínguez Moreno 1994) are applied.

One of the most common practices among shepherds was to make a rue infusion and then give it to the sheep. As we were told by informant 3, a retired shepherd from Terriente in Teruel: "I cooked a pot of rue and made the sheep that had aborted swallow the infusion so it expelled the placenta. You put a stick in the mouth so that it does not close it. You then made it drink  $\frac{3}{4}$  of a liter." This is also certified by Martínez Lirola *et al.* (1997:202) for the lands of Almería where sheep were made to ingest between 250 and 500 cc of a rue infusion for the same purpose. The shepherds of the regions of Camp de Tarragona also administered an infusion for this purpose (Sambola Civit 2012:60).

In Torre d'en Doménech (Castellón), they made an infusion diluted to 2% of the aerial part of the rue to favor childbirth (Mulet Pascual 1991:395). However, shepherds from the Catalan and Huesca Pyrenees made a cross from rue, placed it on the kidneys, and tied it to the wool itself. This external use of the plant was intended to make labor faster (Violant i Simorra 1986:404). This treatment was also discussed by informant 1: "When the sheep aborted, they place rue crosses behind the corral doors. This practice was recommended by healers."

There are many other applications of rue in popular veterinary practice. Its use has been documented in order to reduce inflammation and as an antiseptic among shepherds in the province of Castellón by means of applying a rue oil infusion made from the flowers of the plant (Mulet Pascual 1991:394). In Almería it is used in order to reduce inflammation of the udder (Martínez Lirola *et al.* 1997:203).

The infusion is also used to treat different gastric problems. In Extremadura, it is used for intestinal colic of sheep by taking an infusion of rue leaves (Domínguez Moreno 1994). It was also used in Valencia against colic as well as for indigestion. In the same vein, an infusion was used to fight abusive intake of fresh grass (Palanca 1991:291–292). In the south of France it is used as an astringent, applying poultices consisting of rue leaves with spirits, and is also used to fight ulcers with an infusion (Gourlet 1979:54, 56). Rue, orange juice, and blessed bread are administered in Extremadura to fight rabies (Domínguez Moreno 1994), and rue is also used to treat tongue ulcers as well as spots caused by heat (Cabaret 1986:114).

A particularly interesting use is found in San Juan de Moró (Castellón) where rue is used as part of a strategy of deception for rearing lambs. When a ewe has two lambs and rejects one of them, the aerial part of the rue is rubbed over both. Because she is unable to recognize the smell of the rejected lamb, the ewe nurses both (Mulet Pascual 1991:395).

There are a number of uses in which rue repels animals that are harmful for the sheep. One of the most popular

ones is to delouse the sheep by making a rue infusion with young leaves of American alooe. In another application, the people of Barranquete (Almería) spill the warm infusion on the back of the animal (Martínez Lirola *et al.* 1997:203). This is the same practice mentioned by informant 5, a retired shepherd from Alpuente (province of Valencia), who states that a rue infusion was applied in order to remove scab and lice from the sheep, especially after shearing.

As San Miguel points out (2003:240), rue repels flies, mosquitoes, wasps, rats, and mice as well as spiders and scorpions. It is sprayed in the pens and applied to treat wounds infected with worms. This was done in Extremadura by applying a poultice of rue and blessed thistle boiled in vinegar (Domínguez Moreno 1994). Similarly, rue oil was applied in Valencia on the wounds of sheep in order to keep flies from approaching them (Pellicer 2000:188). This antiseptic nature is also evident in the practices for treating wounds caused by blows which is done by using an oil made from rue flowers in Castellón (Mulet Pascual 1991:395) and also in southern France (Cabaret 1986:114).

### Magical uses

Evil eye is the maleficent influence that one person can exert on another with their gaze. It has been part of the universe of superstitions in a wide variety of cultures since very ancient times. Evans-Pritchard (1937:1) presents us the belief of the Azande, a cattle people in Sudan, whose members included individuals and sorcerers capable of harming others by virtue of an inherent quality of psychic origin. For Baer *et al.* (2006:140), "the belief in evil eye is based on the idea that a person can, intentionally or not, cause harm to another person by talking about them or by thinking admiringly of them. It is no wonder that greed or envy are often the causes that are most commonly attributed to it." Amulets were used in the 1st century B.C. to ward off curses caused by sorceresses, highlighting the more or less deeply-rooted conviction that there are people who bring "bad luck," "evil eye," etc. in an "involuntary" manner (Caro Baroja 1979:60). Indeed, traditional societies have fought to avoid evil caused by disease by using visible amulets and other protective elements (Domínguez Pena 2007:54).

In this sense, rue is seen as a powerful repellent against evil eye and is used extensively to protect oneself against this terrible evil. In Alòder (a town in Castellón), they say that "he/she who has rue is helped by God" (Mulet Pascual 1991). It is also said "rue is useful for any evil" or "rue heals any evil" (Niell & Agelet 2011:202). In Catalonia we also hear (Amades 1982),

*Rue and valerian  
Sweet basil and sage  
Save everyone.*

Rue is used in the region of Gúdar-Javalambre (Teruel) to ward off evil eye for people and in homes. On the magical Saint John's night, they collect it, dry it, and take it with them by way of a scapular or hang it on the house door (Gracia Labrador 1997:199). We were told by informant 5: "It is said that if a person wishes you evil, you would wear rue as a scapular putting it with a cross in a small pouch around your neck. This served the purpose of scaring away people who wanted to do evil to you." If the rue was collected on Saint John's night and an ointment was made with it, it protected against the evils of envy, evil eye, and other similar ailments. The mixture included lard, salted fat, rue, and finely ground white snake powder (Amades 1982).

The use of rue as a protector against misfortune by means of a scapular was already mentioned in the 15<sup>th</sup> century by Paracelsus (Putz 2009:300) who noted that it protects the wearer from spells and helps avoid frights. It is also used for amatory purposes if collected on Saint John's night. Sometimes, for these propitiatory practices, it was planted in pots and watered with white wine, or the hearts of animals pierced by pins and needles were buried in the pots as reported by Sánchez Ortega (1984:97).

As Amades (1982:794) notes, rue collection on Holy Thursday or Friday, "protects against evil spirits and dodges witches and devils." In Andorra, they also protected themselves against evil eye by wearing a pouch around their necks. In order to conjure up good luck, they inserted a snake's head, a small Cross of Caravaca, and a little rue (Niell & Agelet 2011:202). As we were told by informant 9, he used this formula: "Rue was blessed on Palm Sunday. At 10 am they must be placed. I believe, is the only truth...when a sheep is lost...nobody touches it; do not worry about this."

In England, a bunch of southernwood and rue (*Ruta graveolens* L.) was placed beside the prisoner in the dock to protect the court from the contagion of jail fever (De Cleene & Lejeune 2002:393) while in the northern regions of the province of Castellón this plant was placed at the house entrance to protect the houses from witches (Pellicer 2000). One of our informants in the village of El Colado (in Alpuente, Valencia) showed us in 2014 the rue cross that, hidden from prying eyes, guarded her home entrance.

### **Evil eye and shepherds**

Evil eye is said to not only affect people but also homes, pens, and flocks (Baer *et al.* 2006:148) that were the main livelihood. For this reason shepherds resorted to various techniques and strategies to ward off these dangers that could affect the main source of their wealth. The main stratagem was to hang a branch of rue on the inside of a pen behind the main entrance without it being visible from the outside, marking thus the transition between the

outside and the inside. This measure emulates the same system of protection that was used in homes.

Hastfer (1756:151) recommended rue cultivation for every owner of a herd, noting the interest in suspending branches of rue. This practice was also mentioned shortly after by Carlier (1770). In Sort (Lleida), the old shepherds hung a tuft of rue on the corral door to prevent witches from entering to shear goats (Violant i Simorra 1986:404), a practice that is also found in the south of France (Brisebarre 1984:146). A more generic version was customary among the shepherds of Sierra de Gata in Extremadura to avoid diseases (Domínguez Moreno 1994).

Informant 11 mentioned this practice to us, pointing out the importance of keeping the rue hidden. "In order to keep witches from doing evil, a branch of rue was hung behind the corral door in a way that it could not be seen by anyone." This practice was confirmed by informant 3 who recalls the same use, but not its purpose: "At the pen entrance a clump of rue was hung."

In northern Castellón, rue was hung similarly at the pen entrance after it had been blessed on the Feast of the Crosses in May. The rue was placed as small crosses to ward off witches (Palanca 1991:297), and this was corroborated by informant 7: "During the Feast of the Crosses in May, rue was blessed by a priest, to ward off something, to prevent curses at home."

Shepherds in the Empordà region, north of Girona, placed this plant around the corners of the areas where livestock most often passed to protect the area from the action of witches and evil eye (Amades 1982:827). This practice was often used by one informant who emphasized much more the apotropaic uses than the veterinary ones. Informant 1 referred to this practice for very specific purposes to ward off evil eye as was seen in the sheep that aborted their lambs. "When the sheep aborted, rue crosses were placed behind the pen door which was recommended by faith healers."

Most shepherds interviewed, however, refer to this practice in a more generic way to ward off evil eye. Informant 4 tells us: "Three rue crosses are placed in a pouch hanging above the pen door so that witches cannot affect the pen. If the pen is affected, the animals sicken, and the blood can take the wrong course. It is the blood that can lead to diseases. With rue, they cannot act; they do not haunt the pen."

Informant 5 also mentioned this use ("Rue is used so that no one will do evil in pens and homes.") as well as informant 6 ("Since ancient times rue crosses were used for evil spirits. You either got evil or not. It was used for evil eye. [The sheep] were cursed. Some died and you did not know what the reason was."). The latter informant showed us the rue cross on her house door.

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Informant 7 pointed out “On the 3<sup>rd</sup> of May, the priest blessed the rosemary. A cross was made in the pen and homes. Also a stem of rue was blessed. To keep an ‘I don’t know what’ from cursing the home.” This same practice was explained to us by informant 10: “Crossed rue branches were placed on the door of the pens to avoid evil spirits.”

This practice is subject to numerous variations, typical of the divergence of local customs, but the main features remain. In Alcudia de Veo, Castellón, they hide two branches forming a cross in the straw found in the stables to protect the animals from witches (Mulet Pascual 1991:395). Another variant of this practice consisted of hanging the rue cross on the collar of the sheep, as informant 9 told us: “The rue was blessed on Palm Sunday. They have to be placed at 10. I think so, it is the only truth ... when a sheep is lost ... they do not touch it; do not worry because they won’t. My father always made a cross that way and put it on the collar of the sheep.”

The shepherds of the region of Lluçanés, Barcelona, protect sheep against sorcery and evil eye by crossing themselves on the head and again on the back of the animals with an ointment made of salted fat, blessed salt, finely ground rue, and rosemary leaves along with candle wax from the church (Amades 1982).

Another variant that we have been able to identify in Castilla is to mix rue and salt, a mineral that is also known for its ability to ward off evil spirits; this mixture is then spread over the flock. Both elements were sometimes inserted into a small vial and hung in the stables, “to avoid evil eye and envy” (Cruz Sánchez & Escribano Velasco 2013:107–108). This same practice has also been identified in the nearby region of Extremadura where animals and stables are sprayed with salt and rue as is done in Guijo de Galisteo and San Vicente de Alcántara. Both ingredients, inserted into a tube, also hang in pens in the villages of Madroñera, La Cumbre, Robledillo de Trujillo, Jaraicejo, and Puerto de Santa Cruz (Domínguez Moreno 1994).

With the same purpose, rue bushes are planted next to a pen entrance. These serve the same purpose as hanging tufts or when crosses are made, as informant 8 told us: “It is planted next to the pen in case a curse is cast on the cattle.” Our informant qualified his statements with “they say that” or “that’s what I’ve heard” while at the same time showing the tuft he had planted by the pen door.

Yet another example of veterinary rue use comes from Amades (1982). Shepherds would also put rue in the hay of the pens so that the animals were more vigorous and overcame the hardships of life.

Violant i Simorra (1986:404) wrote of one last practice associated with evil eye. In the valley of Flamisell, in the Pyr-

nees, it was believed that a breeder’s enemy could send, by evil means, wolves to attack the breeder’s flock. Traditionally these attacks were associated with witchcraft. To avoid them, a potion made, once again, with salt and rue was prepared and dried and added to ground dry white snake as well as salted pork fat. Once the sheep ate this concoction, “they healed from the spell and other evil spirits.”

### Discussion

We believe it is not necessary to stress the veterinary values rue provides if we take into consideration its widespread traditional use. In that sense, we have seen a second major use of this plant, one in which magical values prevail.

Initially, we were able to confirm how these practices were unknown by younger shepherds who perform more modern and intensive livestock farming and were thus able to focus on more senior shepherds. The abandonment of rural areas and the drastic fall of sheep farms greatly complicated the search for qualified informants. Most were interviewed in their places of residence in small interior towns away from the urban environment. Hence, access to this information became especially complex considering what revealing a secret, private practice entails. In addition, for many, its uses were what modern society would label as out-dated. In this sense, interviewees often used qualifying expressions such as “I have heard,” “they say,” “it was previously used,” or even “I do not think so, but it may help,” collected by Brisebarre (1985:4), in order to mask or downplay personal use.

Both in interviews and in the literature, the main use assigned to rue is magical or apotropaic in nature, chiefly as a talisman and a protector against evil eye. The use of cross-shaped rue, the collection of the plant on certain days, or the fact that it was blessed by the priest implies use of the plant for the above properties, but it is accompanied and endowed with a sacred ritual that reinforces its benefits for protection. Rue’s frequent use to prevent magic and evil eye shows us how shepherds use all the strategies at their disposal, including both natural and magical remedies, to ensure the well-being of livestock and to reinforce the importance given to the negative influences of evil eye.

One of the most important aspects of the practice of magical rue use is associated with the threshold concept, of boundaries that delimit spaces, marking the boundaries between the interior and the exterior of pens. The practice of hanging rue branches helps delimit this space of protection against external aggressions with animals or magical powers. We agree with Brisebarre (1984:153) that these are superstitious practices that probably mask unknown true effects that are underestimated by contemporary veterinary science. Originally these practices would

be associated with religious rituals that would justify them because that which could not be explained rationally was often part of popular religiousness or superstition.

We found oppositions in the use of this plant such as right versus wrong as informant 4 told us. Other oppositions would be normal versus altered or healthy versus poisoned. Thus, a potential livestock disease is accepted and fought (veterinary use) while an ill-intentioned spell is fought with foresight and by means of other magic.

We believe that the key to the use of this plant lies in its strong, nauseating, repulsive odor that repels whoever approaches it. Following the principles of sympathetic magic pointed out by Hubert and Mauss (1904), its strong odor would precisely have the effect of causing rejection and dislike in animals and people who might want to go into the pens or approach the sheep with bad intentions; for the sheep, the bell clappers would be an extension of the threshold. This would be a counter-poison that, as an antidote, would restore the situation to the prior, unpoluted state. This practice was intended to purify the evil that might have been in the pen. In folk tradition, it was contaminated air that transmitted diseases, so the protective barrier of rue would keep them from entering or leaving if diseases already had been introduced and, following Brisebarre (1985:30), "make evil enter by hanging plants in the pen" and that way it would restore the natural balance of things bringing purity back to the airs inside.

## Conclusions

As has been seen, rue is a plant that is widely used by shepherds not only because of its strictly veterinary uses but also in cases where it is accompanied by other ancillary practices associated with popular religiousness. It is also important because of perceived magical powers as described by the majority of informants consulted. The shepherds take strong measures to protect what they have been entrusted to guard, their flock of sheep, and the significant number of risks threatening a flock such as disease, vermin, theft, and loss leads shepherds to develop defense and protection strategies against these dangers. The additional risk of "evil eye" seems to group all evils unknown by medicine or by the shepherd, and to combat this evil eye equally unknown or magical countermeasures are taken by using known materials such as rue.

To the authors' surprise, the fieldwork revealed that the concern for evil eye is still alive among the people interviewed, especially the older people, in line with other common protection practices in our society. However, these practices have been abandoned by the young breeders, who are fewer in number than their elders, due to rural depopulation and the abandonment of these traditional professions. They have replaced rue with agricultural insur-

ance as a protection ritual. We believe that in this loss of uses traditional veterinary practices that are useful have been wrongly abandoned, but they have been replaced with others that more akin to modern science.

Rue appears to act because of its strong, violent, and unpleasant odor. When suspended in the doorway, a barrier is marked between external and internal air, creating a health, security, and protection barrier against external threats. The fact that rue is used secretly and is hidden underscores its magical character; its protection is effective only if its use is not discovered by anyone who seeks harm by attacking the pen. The magical sense of the hanging bouquet, or its variants, are the key to protecting the house of the sheep, establishing an overlap between practices of the Christian religion, the rue cross, and natural religion.

The use of rue is accompanied by ritual elements that adorn and enrich its powers in the minds of its users. The importance of collecting the plant on specific dates, mainly sacred dates, to reinforce its magical nature stands out. Similarly, it is used in conjunction with other negative elements such as the snake which provide significant added value to the healing powers as we have seen in the past with the use of toads (Vidal-González 2013).

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