

Myrtle, Basil, Rosemary, and Three-Lobed Sage as Ritual Plants in the Monotheistic Religions: an Historical–Ethnobotanical Comparison

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This study surveys the history, origin, and ethnobotanical evidence of why *Myrtus communis* L., *Ocimum basilicum* L., *Rosmarinus officinalis* L., and *Salvia fruticosa* Mill. are used as ritual plants in the main monotheistic religions (Judaism, Islam, and Christianity, but also Druze, Mandaism, and Zoroastrianism). All these aromatic plants are odoriferous, medicinal, and apotropaic. By reviewing about 180 selected references, mainly from the Mediterranean basin, we compiled five tables with 313 citations on these ritual uses in different territories and according to diverse religions. The use of these species in rites of passage is found in all the main monotheistic religions and, in critical stages of the human life cycle, is related to warding off the evil eye/bad spirits/Satan, demons, or witches. These ritual customs have deep roots in ancient pagan cultures. The use of these plants in official religious ceremonies shows that different religious ritual uses of myrtle in Judaism (as a compulsory part of the Sukkoth festival), basil in the Greek Orthodox Church (mainly as a component of the Exaltation of the Cross), and rosemary mainly in the Catholic Church (especially as a decoration in the church). The uses of the three-lobed sage for a ritual by Muslims in the Holy Land are local and are not part of established religious ceremonies. While these plants have many similar ritual aspects in different regions/religions, it seems that they can be used interchangeably, probably as a result of syncretism and cultural migration of customs.

Key Words: Ritual plants, Christianity, Judaism, Islam, ethnobotany, rites of passage.

Introduction

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A *ritual plant* is one (or parts thereof) that is used in private or official ceremony/circumstances to elevate/improve/create/touch a tunnel with gods/

supernatural powers by individual/official religious figures or as an integral part of well-established official religious events. A “rude” classification of ritual plants (not mutually exclusive) may include sacred trees, hallucinogenic and narcotic plants, incense, and aromatic plants (not as incense).

Aromatic plants contain odorous volatile substances. They constitute hundreds of organic compounds including terpenoids, benzenoids, organic sulfur, and nitrogenous compounds, which work at different systems and organs of the organism (Skaria 2007). Aromatic plants are used for the psychological and physical well-being of humans by promoting natural healing and health. Aromatherapy is an emerging art of healing through essential oil, which has therapeutic effects on the body, mind, and soul (Skaria 2007).

Religious uses of aromatic plants are often justified by the value of these plants due to their appreciable perfumes and by the benefits that people claimed to gain from their combustion. Indeed, a common characteristic of medicinal, religious, and magic practices was the healthy use of the smoke of aromatic plants as incense (Brandon 1991; Merali et al. 2018; Mulas 2006). This generalization may be exemplified by González et al. (2014), who noted that the most documented curative rituals (in western Spain) are based on the smoke produced by the combustion of certain aromatic or non-aromatic plants.

STUDIED PLANTS

As the comprehensive list of plants related to ritual uses in the world is far more than can be discussed in a journal paper, we made this review of the ritual uses of four aromatic species focusing on rites of passage, birth, and death around the Mediterranean basin. With the aim to perform the study with a religious point of view, we try to establish a comparison for current and ancient uses, their similarities and differences, and their possible syncretism. Basing on the knowledge that myrtle has an official role in Judaism (Nehemia 8:15), rosemary (Rätsch and Müller-Ebeling 2006) in the Catholic Church, basil (Argenti and Rose 1949; Parker 2011) in the Greek Orthodox Church, and three-lobed sage (Dafni and Khatib 2017) in Palestinian Muslims (Fig. 1), our inclusion criteria was limited to these four plants. The ritual uses of these plants in the main current monotheistic religions

are analyzed, along with other less common ones, with notes on ancient Mediterranean and Middle Eastern cultures.

Myrtus communis L. (Myrtaceae) is an aromatic evergreen perennial shrub or a small tree that is widespread throughout the Mediterranean region and the Middle East. It grows wild but is also widely cultivated (Özkan and Gûray 2009; Sumbul et al. 2011), at least since Theophrastus (1916), due to its aromatic properties, edible fruits, fragrant white flowers, evergreen and culinary leaves, and uses in traditional medicine (Özkan and Gûray 2009; Sumbul et al. 2011). Its use as incense is well known since the time of Gilgamesh (circa 2100 B.C.E., Gilgamesh, Table XI: 4; George 1999; Harris 2001).

In the ancient world (i.e., the region around the Mediterranean and the Near East before the fall of the Western Roman Empire), myrtle was dedicated to several goddesses. In Babylon (18th to 6th centuries B.C.E. in Mesopotamia), it was dedicated to Ištar, the equivalent to the Phoenician goddess Astarte (Blech 1982; Drucker 1914). In the Zoroastrian religion (before the 6th century B.C.E., started in current Iran), myrtle was dedicated to Ahur Mazda (Drower 1956; Haug et al. 1884); in Ancient Greece (12th century–9th century B.C.E.) to Persephone, the goddess carried off by Hades to become the queen of the underworld and funerals (Lohman 1979) and Aphrodite (Pausanias 1898; Staples 1998); in Rome (8th century B.C.E.–5th century C.E.) to Venus (Eitrem 1923; Hamilton 1814; Plinius 1938), and to Mars (Macioti 1990), Minerva (Macioti 1990), Bacchus (Gerola et al. 1962–1963), and as the Flower of the Amazons (Cattabiani 1996; Macioti 1990). Myrtle was also the tree of Rome (Cattabiani 1996; Gerola et al. 1962–1963). Apart from this, myrtle was used in victory crowns in ovations and triumphs (Cattabiani 1996; Gerola et al. 1962–1963; Plinius 1938). Herodotus (1922) wrote that the Persians used it in sacrifices and to cover the ground in celebrations. In Judaism, it is an essential part of the “Four species,” which was used in the Holy Land in the “Tabernacle” (Sukkot) feast since Biblical times (Schaffer 1982).

Through the ages and in cultures, myrtle symbolizes immortality and eternity in Ancient Iran (Drower 1937), Greece (Ferber 1999; Rogić et al. 2012), and the Middle East (Haddad 1969); regrowth and vitality in Ancient Iran (Drower 1937); authority, beauty, and youth in Ancient Greece (Baumann 1993; Folkard 1884; Wilson



Fig. 1. Pictures of the ritual use of the studied species. **a** An Orthodox Jew examines the quality of a myrtle twig for its use in the feast of the Tabernacle, Sukkoth (Jerusalem, 16.9.2014; Photo: Sakra Jen). **b** A Greek Orthodox priest, at the Holy Sepulcher in Jerusalem, holding a bunch of sweet basil at the Feast of the Exaltation of the Cross. (Jerusalem, 17.9.2012; Photo: Danchu Arnon). **c** Baptism in the Jordan River, water is sprinkled with a bunch of basil (Kasr El Yahud, 18.1.2016; Photo: Danchu Arnon). **d** Rosemary and myrtle as apotropaic herbs in a circumcision ceremony of the Karaites (an old small Jewish sect, Kfar Bilu, 3.5.2011; Photo: Danchu Arnon). **e** Rosemary as decoration of the Cross of May, a traditional fest in Spain in which crosses are decorated with plants and flowers (Noez, Spain, 16.5.2002. Photo: Javier Tardío). **f** *Salvia fruticosa* planted on a Muslim grave (Arab El Aramshe, Northern Israel, 15.3.2000; Photo: Amots Dafni).

1809); and victory in Ancient Rome (Folkard 1884). In Christianity, myrtle was dedicated to the Virgin Mary as it had symbolized purity and fertility (Folkard 1884). In Ancient Greece, myrtle was often used for decorating temple sanctuaries (Baumann 1993) and gardens in Rome (Grimal 1984; Webber 1971). Myrtle is related to divinity in Mallorca; it is also said that it delimits a sacred space (Carrió 2013). Moreover, myrtle is a well-

known medicinal plant since the times of the Sumerian civilization (Mesopotamia, c. 4500–c. 1900 B.C.E.) (Özkan and Gúray 2009; Sumbul et al. 2011) to current times, with a number of modern ethnobotanical references (e.g., Tardío et al. 2018 for Spain).

Ocimum basilicum L. (Lamiaceae) is a widespread cultivated plant, originated in Asia (all the Tribe Ocimeae; Paton et al. 2004), although previous

non-phylogenetic studies placed its origin elsewhere in Iran (Aubaile 2012:17; Roxburgh 1874:464), subtropical Africa, (Branca and La Malfa 2008:24), or central Asia.

Sweet basil has symbolized, through times and cultures, mourning in Ancient Greece (D'Andrea 1982:32) and love in Ancient Rome (D'Andrea 1982:32), which is the basis for its current devotion to love and courtship in Italy, Romania, and Moldavia (Skinner 1915:78–79) and to mourning in Europe (De Cleene and Lejeune 2003 I: 645–647). Basil is also a well-known medicinal plant (Tobyn et al. 2011:222) used at least since Hippocrates (c. 460–c. 375 B.C.E.) and Dioscorides (c. 40–c. 90 C.E.). It became a widespread medicinal plant on a worldwide scale (Adtani et al. 2014:250; Bilal et al. 2012:73). It is important not to confuse the plant with the Holy basil, *Ocimum sanctum* L., as we will explain below.

Sweet basil was well known during the Ancient Greek and Roman civilizations, supposedly brought by Alexander the Great (356–232 B.C.E.) to Greece (Darrah 1972:4; Lupton et al. 2016:28), diffused by the Arabs with the expansion of this culture since the 7th century C.E. (Aubaile 2012:83) and to other parts of Europe by Charlemagne (c. 768–814 C.E.; Onofrei et al. 2015:162).

Sweet basil is used as an inseparable component of the festival of the Exaltation of the Cross of the Eastern Orthodox Church, based on the story of Saint Helena (c. 250–c. 330 C.E.), the mother of the Emperor Constantine, who found the True Cross under this plant (Argenti and Rose 1949 I:186; Parker 2011:30–31). According to the legend that arose at the end of the 4th century, Saint Helena, during her trip to Palestine (326–328 C.E.), chose a site to begin excavating, which led to the recovery of three different crosses. One of them was the Holy (True) Cross. On this site, the Basilica of the Resurrection (or the Holy Sepulcher) arose, consecrated on September 13th, 335 C.E. The following day, the feast of the Exaltation was established (Tradigo 2006:155).

Rosmarinus officinalis L. (Lamiaceae) is a Mediterranean plant (Do Amaral and da Rocha 1972), which was spread in ancient times to Ancient Egypt and the Near East (Lev and Amar 2008). It was used widely as a medicinal plant since the time of Ancient Egypt (although it is not native in that country) (Germer 1985; Janick 2002; Manniche 1989), Greece (Aretaeus of Cappadocia 1898), and Rome

(Dioscorides 2003; EMA 2010), as well as in later periods, up until today (Andrade et al. 2018; Begum et al. 2013; Bonet 2014; EMA 2010).

In Ancient Greece, rosemary was thought to be a gift from Aphrodite to mankind, and statues of gods were garlanded with this plant (Baumann 1993). In Ancient Rome, rosemary was consecrated to the Lares—deities whose primary function was to protect the family home (Sofroniew 2016). Rosemary led the souls in the hereafter for both pagans and Christians (Cattabiani 1996; Lapucci and Antoni 2016). In Europe, rosemary was considered the emblem of faithful remembrance (Pratt 1840). Rosemary currently symbolizes both death and love in a general way (D'Andrea 1982), remembrance (Pratt 1840), eternity of the souls (Drake 1843; Mason 1873), eternity (Whittick 1971), love and fidelity (Latorre 2008; Waterman 1860;), nativity (Webber and Symbolism 1971), and virginity (Rich 1998).

Rosemary is connected with several Christian legends that relate this plant to the Virgin and/or Jesus (Bonet 2014; González et al. 2012; Rättsch and Müller-Ebeling 2006; Rohde 1922). This is the very reason why rosemary was Christianized (Rättsch and Müller-Ebeling 2006), as can be seen in its use in various religious festivities. Its medicinal properties have been studied extensively and, therefore, is found in most of the literature on medicinal plants (e.g., Begum et al. 2013; Blumenthal et al. 2000; Bruneton 1995).

Salvia fruticosa Mill. (= *S. triloba* L.f.) (Lamiaceae) is an evergreen native shrub of the central and eastern Mediterranean region, distributed from Sicily and Cyrenaica through the southern Balkan Peninsula (Albania and Greece) to western Syria (Hedge 1972). Three-lobed sage is common and abundant in plant communities of garrigue and maquis in the eastern Mediterranean region and the batha (Mediterranean dwarf shrubs formation) formations of Israel (Rivera et al. 1994; Zohary 1962). It is one of the most commercially exploited sage plants, often referred to as Greek or Mediterranean wild sage (Skoula et al. 1999). In Israel and Palestine, it symbolizes purity and justice; thus, it has an important role in daily rituals in the Muslim life cycle in Israel—it accompanies each person as a main ritual plant from birth for family feasts, weddings, and funerals (Dafni et al. 2006; Dafni and Khatib 2017). Three-lobed sage is a common and very popular medicinal plant in the eastern Mediterranean (Rivera et al. 1994; Yaniv et al. 1982).

Goals and Methods

The present study is an attempt to identify the historical roots, origin, and ethnobotanical possible explanations of why *Myrtus communis*, *Ocimum basilicum*, *Rosmarinus officinalis*, and *Salvia fruticosa* (= *S. triloba*) are extensively used as ritual plants in monotheistic religions (Fig. 1). A bibliographic review has been carried out in order to achieve data for the ritualistic use of these plants over time in different territories, focusing on the Mediterranean basin and nearby territories, i.e., not misprizing other territories mentioned in our references. We aim to elucidate what is common and what is different in ritual uses of these four plants among the main monotheistic religions.

Results

We have attained data of the religious ritualistic use of the four aromatic species in the main monotheistic religions of the Mediterranean (Judaism, Christianity, and Islam), and three others (Mandaeism, Druze, and Zoroastrianism), as well as for ancient non-monotheistic religions from the Mediterranean.

The results of the literature survey are presented in Tables 1, 2A–C, and 3. In these tables, data from Christian territories were grouped into a single column. To explore the differences among the diverse Christian Churches (Catholic Church, Protestants, Anglicans, Eastern Catholic Churches, Eastern and Oriental Orthodox, etc.) or specific religious sects in our studied territory, we encourage readers to examine these in the provided original references. We mention some important differences in the ritual use of our plants in the discussion.

A total of 312 citations have been included in the tables from 178 references.

Discussion

The Use of Aromatic Species in Purification, Good Luck, Disease Protection, Evil Eye Avoidance, and Associations with Witches and Demons

As one may see, all of these four aromatic species are used as incense, for purification or disease protection, or in good luck wishes, and against the evil eye, witches, and demons, so to some extent they can be considered apotropaic (Table 1). As sometimes it is very difficult to differentiate between incense for purification, good luck, protection, etc., we decided

to gather all the data into the same table. It can be seen (Table 1) that the most widespread ritual use in this category among the studied religions is for myrtle, which has been used in all of the monotheistic religions since antiquity. Rosemary is used mainly in Europe by Christians, with some references to Sephardic Jews in Israel and Muslims in Morocco (Table 1). The use of basil seems to be limited to Christians, especially in south Europe and the Balkans, and the use of three-lobed sage is mostly confined to Muslims in the Holy Land.

THE USE OF AROMATIC SPECIES DURING THE HUMAN LIFE CYCLE

Circumcision and Childbirth

Some of the uses from Table 1 can be considered in relation to childbirth as “preventive” or “protectors,” in the sense of protecting the newborn from possible diseases and other misfortunes. Myrtle was used in Ancient Greece and Rome against the evil eye and, to a major or minor extent, is still used in this sense by all the monotheistic religions. This preventive use is in relation to birth in Holy Land Christians, where Muslims and Druzes use the plant as a disinfectant to treat the delicate skin of babies after circumcision (Dafni 2016).

From a medicinal standpoint, myrtle was frequently used in the Orient as a disinfectant powder for children (Harrison 1961), a use that is still relevant today, at least in Greece (Hadjikyriakou 2007). Myrtle is known as an aseptic and antibacterial plant due to its chemical properties (Sumbul et al. 2011). Thus, it is not surprising that it was used to stop bleeding after circumcision by Muslims, Druzes, and Jews (Table 2A). To a major or minor extent, myrtle is used in this category by these religions, and to a minor extent also by Christians; it is not used in circumcision but in baby care (Table 2A).

Basil is used at childbirth by the Bulgarian, Romanian, and Serbian Orthodox Churches. South Slavs (at least, Bulgarians, Romanians, and Serbians) used to put several apotropaic plants in a newborn baby's bathwater to protect the child, including basil (see Table 2A for references). As with myrtle in Israel, Turkey, or Lebanon, rosemary has been also used in North Africa as an antiseptic and as a vulnerary remedy for circumcision wounds. It is also used by some Jewish sects, such as the Karaites, in the circumcision ceremony (Fig. 1d; A. Dafni, pers. obs.). This sect keeps only the commitments mentioned in the

TABLE 1. THE USE OF MYRTLE, BASIL, ROSEMARY, AND THREE-LOBED SAGE AS INCENSE, PURIFICATION, GOOD LUCK WISHES, DISEASE PROTECTION, AND AGAINST THE EVIL EYE, WITCHES, AND DEMONS (SELECTED REFERENCES).

Religion/plant	Ancient religions	Judaism	Christianity	Islam	Others
Myrtle	Ancient Sumer: <i>Gilgamesh</i> ; George (1999:94); Harris (2001:58)	Talmudic period: 3–5 centuries CE, in <i>Kabbalistic view</i>	Europe: Monger (2013:485–486)	Iran: Donaldson (2002:73)	Druze: Israel, Dafni (2016:224)
	Ancient Greece: Alexiou (2002:5); Hippocrates (1993:7:74;	—Lauterbach (1940: passim). Iraq: Sassoon (1949:183);	Italy: Cornara et al. (2009:28)	Israel: Dafni (2016:224)	Mandaeans: Iraq, Aldihisi (2008:44);
	146,172,182,210,226;8:151,9-86,108, 118,124,134,136;10:50); Ochs (1993:45)	Zubaida (1989:105)	Israel: Dafni (2016:224)	Israel: Dafni (2016:224)	Marcovic (1981:372)
Basil	Ancient Rome: Plinius (HN 15:35–38)	Morocco: Westernmark (1926:1:108)	Bulgaria: Kazasova (2017:29);		
	Ancient Greece: Hippocrates (1993:5:119; 7:93; 16:70,84,128)		Mishnev (2010:7–9,19);		
			Mishnev (2016:159); Sirakova and Dimitrova (2003:149)		
Rosemary			Greece: Lawson (2012:13);		
			Markantonis et al. (2006:32)		
			Italy: Catlabiani (1996:379);		
			Lapucci and Antoni (2016:100)		
			Romania: Kolodziejska-Degorska (2012:297); Murgoci (1923:359)		
			Serbia: Stevanović et al. (2014:246);		
			Tasić (2012:73)		
			Spain: Velasco et al. (2010:44)	Morocco: Fogg (1941:290);	
			England: Brand (1842:192);	Westernmark (1926 II:60–61)	
			Lemnius (1658:391);		
			<i>Elizabethan period</i> : Rich (1998:169); 15th century—		
			Baker (2001:132)		
			Greece: Akseli and Manakidou (1997:83–109);		
			Baumann (1993:89); Leontis (2009:94); Markantonis et al. (2006:38);		
			<i>Crete</i> : Machin (1983:11);		
			<i>purification in the Church</i> : Kain (1992:237)		
			Hungary: Roman et al. (2015:60)		
			Italy: Catlabiani (1996:241);		
			Grieve 1931:682);		
			Lapucci and Antoni (2016:349);		

(Continued)

TABLE 1. (CONTINUED).

Religion/plant	Ancient religions	Judaism	Christianity	Islam	Others
Three-lobed sage	Ancient Greece: Hippocrates (1993:7:114, 124, 136, 146, 182, 210, 214; 8:170; 9:42, 62, 80, 86, 114, 116, 128, 136; 15:166, 186, 204; 16:66)		<i>Albanian in Italy</i> : Quave and Pieroni (2005:55) Portugal: <i>Madêira</i> : Hornell (1925:306) Slovakia: Conrad (1990:58); Vážanová (2008:139) Spain: Alcover (1975:86); Grieve (1931:682); Taylor (1900:138); <i>Good luck or protection</i> : Benítez (2009:421); Bonet (2014:211 and references therein); González et al. (2011:382); Mulet (1991:384); <i>Against witches or evil eye</i> : Cobo and Tijera (2011:182); González et al. (2014:39); Guzmán (1997:302); Latorre (2008:93); Verde et al. (1998:58); Villar et al. (1987:200) Spain: Rivera et al. (1994:193)		Israel: Dafni et al. (2006:4–5); Dafni and Khatib (2017:56, 156)

Pentateuch, including circumcision (Astren 2004; Lasker 2004). One of us attended such a ceremony in which myrtle and rosemary were put on the pillow that carried the newborn during the ceremony, in order to prevent evil eye. On the other hand, the antiseptic properties of rosemary are also well known (Begum et al. 2013; Bruneton 1995).

On the other hand, three-lobed sage is used only by Muslims in the Holy Land, Israel. When an infant is born, he or she is placed on a bed of fresh leaves of this plant while the mother drinks a “tea” made from the leaves. On this occasion, a ceremony called “maulad” is performed. Leaves of the plant are mixed with barley and placed in the pockets of the invited friends and relatives, with which an incense is later elaborated at home and burned against the evil eye and demons. It is placed on burning coals and then the house is blessed with a good fragrance and the demons are expelled (Dafni et al. 2006; Dafni and Khatib 2017).

Therefore, it seems that the use of these aromatic plants in circumcision and childbirth is for two main reasons: they are antiseptics due to the presence of essential oil and considered protection against possible incoming diseases and misfortunes.

The Use of Aromatic Species in Weddings

Of the studied plants, it seems that myrtle is the most important “wedding plant” by all religions in the Ancient East and the Mediterranean regions since antiquity (Table 2B). The basis for this use follows the tradition that myrtle was sacred to the ancient goddesses of love (especially to Aphrodite in Ancient Greece and Venus in Ancient Rome; see “Introduction”), which explains why it has been used at weddings since this period (Table 2B). James (1952) argues that in Ancient Rome, the “crowning of the bride and groom with crowns of gold and silver, or olive and myrtle,” are common elements in both marriage and royal coronation ceremonies. In both rites (i.e., weddings and royal coronation), as interpreted by Williams (2012), these elements symbolize victory over the forces of evil and death at a critical transition in society. Moreover, myrtle is still used in weddings in modern Europe (Table 2B), e.g., as in Queen Victoria’s marriage in 1840 (Nelson 2009; Rich 1998). It is also considered useful in this rite due to its use in evil-eye protection (Dafni 2016).

Another important wedding plant in the Mediterranean is rosemary. Since the plant was dedicated to

the Virgin, in Christianity it was a symbol of virginity, being worn by brides or carried in their wedding bouquets (Rich 1998); it is still used for this purpose in several European countries (Table 2B). For example, in Spain, a branch is hung in the fiancé’s window before the marriage (Blanco and Cuadrado 2000), and sometimes a small branch is placed in the buttonhole of the fiancé’s jacket (G. Benítez, pers. obs.).

Basil and three-lobed sage are not used as much. Basil is only used in this rite by Bulgarian and Greek Orthodox Churches and also as an ornament for the groom’s headdress by some Muslims in Yemen (Table 2B). In the Holy Land, incense of three-lobed sage leaves is placed on burning coals. It is used against the evil eye and to expel demons at every Muslim wedding and at any other family feast (Dafni and Khatib 2017).

The Use of Aromatic Species at Grave Sites and in Funerals

Again, myrtle seems to be the most widespread plant for this ritual use; it has been associated with death and graves since antiquity by all religions (Table 2C). In Ancient Greece, evergreen myrtle was also sacred to Persephone and therefore can also be attributed to the sphere of death (Blech 1982; Eichberger et al. 2007; Lohman 1979). It was laid on the dead body to protect against the evil eye (Alexiou 2002). Twigs of myrtle were placed on graves to symbolize the virtue of the dead (Baumann 1993). Jewish forebears laid myrtle “on the bed of the deceased in his honor” (Babylonian Talmud: Rashi Beitza, 6a). Lauterbach (1940) mentioned that this practice had double significance: first, it drove away the demons who might try to snatch the departed soul. Second, it provided a vehicle for the soul to fly up to heaven. In North Africa, myrtle was used in relation to funeral and burial ceremonies because it is believed to be a symbol of eternity (Westermarck 1926). Another reason for the use of myrtle on graves in Turkey is mentioned by Ray and Rauwolff (1738): “They (visiting women) put some green myrtle in ... the tomb; and they are of the opinion that their relations are happier the longer these remain green and retain their color.” According to Buckley (2002), the Mandaeans in Iraq use myrtle in ceremonies to honor their ancestors because it “preserves the soul” and because of “myrtle’s evergreen life force.” It is also used in the New Year Festival: “The symbolism

TABLE 2. THE USE OF MYRTLE, BASIL, THREE-LOBED SAGE, AND ROSEMARY IN RITES OF PASSAGE

Religion/plant	Ancient religions	Judaism	Christianity	Islam	Others
A: Birth and circumcision					
Myrtle		Israel: 16th century— Bartenura 1991 (Tractate Shabbat 18:3)	Israel: Dafni (2016:224) Bulgaria: Srakova and Dimitrova 2003:144– 149; Todorova-Pirogova (2003:55); Zheleva (1998:148) Romania: <i>Baptism with Holy Water</i> —Pieroni et al. (2012:437) Serbia: Stevanović et al. (2014:246); Tasić (2012:53)	Israel: Dafni (2016:224) Lebanon: Sessions (1898:7) Turkey: Özkan and Güray (2009:164)	Druze: <i>Israel</i> , Dafni, (2016:224–226)
Basil					
Rosemary					
Three-lobed sage					
B: Weddings and marriages					
Myrtle	Ancient Greece: Baumann (1993:51); Connors (1997:307); Folkard (1884:455,517); Mason (2006:28); Rogić et al. (2012:347); Tanner (2001:262); Versnel (1992:44) Ancient Rome: Folkard (1884:455,517); James (1952:53)	Mesopotamia, 3–5 centuries AD, Babylonian Talmud (Bezah 6a; Ketubbot 17, at Shabbat 150b, Erubin 40a) Palestine, 3–5 centuries AD, Jerusalem Talmud (<i>Peah</i> , 1:15; Kidushin 12c)	Modern Europe: De Cleene and Lejeune (2003:1443–444); Folkard (1884:34,39,456); Rich (1998:17) England: Brand (1842:53) Greece: Baumann (1993:51) Italy: Catrabiani (1996:351); Gerola et al. (1962–1963:53–54); Lapucci and Antoni (2016:271); Macioti (1990:115); Israel: Dafni (2016:226) Bulgaria: Stareva (2005:248); Todorova-Pirogova (2003:55); Zheleva (1998:148) Greece: Lawson (2012:328); Monger (2013:141); Paradellis (2008:229) England: Monger (2013:passim); Northcote (1903:129–130,109); Parkinson (1629:426); Pratt (1840:56, 49–52,59,161); Rich (1998:17); Taylor (1900:140,143–5) Greece: Paradellis (2008:229); <i>Cretz</i> ; Taylor (1900:138)	North Africa: Boulos (1983:11) Israel: Dafni and Khatib (2017:Passim)	Druze: <i>Israel</i> , Dafni (2016:224) Mandaeans: <i>Iraq</i> , Marcovic (1981:372)
Basil					
Rosemary	Ancient Greece: D'Andrea (1982:73) ; Markantonis et al. (2006:38) Ancient Rome: D'Andrea (1982:73); Monger (2013:129)				

(Continued)

TABLE 2. (CONTINUED).

Religion/plant	Ancient religions	Judaism	Christianity	Islam	Others
C: Death, funerals, and burials	Myrtle	India: <i>Jews</i> —Needle (2008:67)	Hungary: Roman et al. (2015:60)		
		Iran: Loeb (2012:209)	Malta: Cassar-Pullicio (1951:401)		
		Mesopotamia, 3–5 centuries CE, Babylonian Talmud (Bezalel 6a)	Poland: Kennedy and Uminska (1925:53,54,57)		
		Morocco: <i>Jews</i> —Ben-Ami (1998:81,256)	Serbia: Lodge (1935:259, 260); Roman et al. (2015:60); Sevanović et al. (2014:238)		
			Slovakia: Vážanová (2008: 65, 85,139)		
			Spain: Alcover and Moll (1959:552); Blanco and Cuadrado (2000:122); G. Benítez (pers. obs.)		
				Israel: Dafni and Khatib (2017:218–219)	
				Israel: Dafni (2016:228)	Mandaans: <i>Iraq</i> —Aldihisi (2008:34); Buckley (2002:39)
				Lebanon: Addison (1838:17,18)	Zoroastrians: <i>Iran</i> —Ramazankhane (2009:162)
				Syria: Spoer and Spoer (1927:131)	
Three-lobed sage				Turkey: Bahar et al. (2012:112); Burder (1822:36); Goodwin (1988:62); Özkan and Güray (2009:165); North Africa: Lane (1836:306); Leggy (1935:109); Moghrani and Maachi (2008:518); Westernmark (1926 1:52, 11:passim); Westernmark (1933:109);	
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TABLE 2. (CONTINUED).

Religion/plant	Ancient religions	Judaism	Christianity	Islam	Others
Basil	Moldenke and Moldenke (1952:144); Puckle (1926:167)				
	Egypt: <i>Roman periniá</i> ; Hale (1833:18); Burr-Thompson and Griswold (1963:Tab 154); Eichberger et al. (2007:15,33); Garland (2001:116); Handy (2007:118); Riggs (2000:130)		Bulgaria: <i>fenenál</i> —Kirilova (2010:260); Mistehev (2016:159); Sralkova and Dimitrova (2003:144); Stareva (2005:258); Todorova-Pingova (2003:55); Vakarelski (2008:203); Zheleva (1998:1480) Cyprus: Hadjikyriakou (2007:305) Eastern Europe: Darrah (1972:6) Egypt: Skinner (1915:59) England: <i>Madinal</i> —Drower (1956:87) Greece: Alexiou (2002:39,122); De Cleene and Lejeune (2003, II:54); <i>Crete</i> : Danforth (1982:104) Iran: Skinner (1915:59) Italy: Batini (2007:61–63); Carabiani (1996:378–379); De Cleene and Lejeune (2003, II:54); Guarrera (2006:145); Lapucci and Antoni (2016:100) Romania: Pieroni et al. (2012:437) Serbia: Stevanović et al. (2014:246) Europe: De Cleene and Lejeune (2003 I:647) Cyprus: Vickery (1984:184, 187,188); Hadjikyriakou (2007:291) England: Parkinson (1629:426); Brand (1842:49,160, 212–1);		
Rosemary	Ancient Greece: D'Andrea (1982:73); Puckle (1926:183)				
	Ancient Rome: D'Andrea (1982:73); Puckle (1926:183)			Egypt: Skinner (1915:59) Iran: Skinner (1915:59) Israel: Dafni et al. (2006:3)	

(Continued)

TABLE 2. (CONTINUED).

Religion/plant	Ancient religions	Judaism	Christianity	Islam	Others
Three-lobed sage			Pratt (1840:51–3,55); Drake (1843:117); Taylor (1900:140,146–8); Northcote (1903:129); Litten (1991:144); Drury (1994:102); Cressy (1997:428,438) Iraq; Drower (1937:183) Italy: Cattabiani (1996:242); Guarrera (2006:178–179); Lapucci and Antoni (2016:349) Spain: San Miguel (2004:292)		
				Israel: Dafni et al. (2006:4–5)	

of ... fresh myrtle is linked with the idea of fertility and life triumph over death” (Drower 1936). This view was also expressed by Muslims in Israel (Dafni 2016). As it was summarized by Ferber (1999), “Myrtle is an evergreen and thus suggestive of life’s power against death ... perhaps for this reason it was frequently used in garlands and crowns and to deck tombs.” Myrtle is currently still used in crowns and to decorate tombs in several circum-Mediterranean countries, from Spain to Israel and Lebanon, including North Africa, Iran, Iraq, and as far as India (Jewish communities; see Table 2C). Basil is used in funerals only by different Christian sects in Europe from England to Egypt (Table 2C). For instance, in Serbia, where many customs are connected to the cult of the dead, when somebody dies, a bunch of basil is put into their hands, and when going to the graveyard, a bunch of basil is put on the cross. It is believed that the basil helped the Serbian people avoid the epidemic of the plague that devastated Europe in the late Middle Ages (Stevanović et al. 2014).

Rosemary was used in funerals in Ancient Greece and Rome and is still mainly used today by Christians in Europe; however, its use is quite rare for Muslims from the Middle East (Table 2C). De Cleene and Lejeune (2003) explain the use of rosemary in funerals in Europe: “It was in fact ... that its aroma conserved the dead body and that its evergreen leaves guaranteed immortality. Since incense was expensive, there was a preference for the aromatic rosemary in religious ceremonies in antiquity, especially burial.”

On the other hand, garlands of the three-lobed sage for incense are left at the graves of saintly Muslim people in Israel (Fig. 1f), as well as in front of sacred trees, for the private use of the visitors who pray and burn incense in honor of the holy (Dafni 2011). In Israel, *Salvia fruticosa* is related to the angels; when a person is deceased, the angels come to visit him and because it is believed they like good odors, this is one of the reasons why the plant is placed and planted on graves (Dafni et al. 2006). This view is related to the common belief that angels go to judge the dead person in his/her grave (Granqvist 1965; Spoer and Spoer 1927).

Why Myrtle, Basil, Three-Lobed Sage, and Rosemary Are Used in Rites of Passage

People who are in a liminal phase of any rite of passage are seen as vulnerable to a range of

misfortunes, malevolent forces, and illnesses (Grimes 2000; Turner 1969; van Gennep 1960). The likeliest moments for suffering an attack from the evil eye are during intermediate phases of rites of passage like birth, circumcision, marriage, or pregnancy (Burkhalter Flueckiger 2015; Lauterbach 1940; Louw 2007; Myrvold 2004; Obladen 2017; Peters 1990; van Gennep 1960).

Simms (1992) has documented the importance of myrtle at the rites of passage: "...scholars seem quite aware of myrtle's importance to the ceremonies and even associate its use with prophylactic power against evil spirits, these efforts to ease the transition from one state of living to another with fragrant odors...." Thus, there is significance to Drower's (1937) words: "... smelling of the perfume of the myrtle ... implied symbolism of ever-green immortality, and of the resurrecting forces of spring, germination, and growth." Although this conclusion was related to the Mandaeans, it could be expanded to explain the broad use of myrtle in many ceremonies in different religions.

The Serbian botanist Josif Pančić (1814–1888) wrote about basil (cited by Stevanović et al. 2014):

"...this plant is to our people much more beloved from many others that are higher in growth, with more beautiful flowers and smells. That is because basil follows the Serbs through all the serious events in life: from birth, where a bouquet of basil sanctified in the holy water is put in the cradle near the head, until his death, where his sister or cousin in plants it on the grave...."

These authors summarized the importance of basil in the lives of the Serbs: "It followed people from their birth, when a bunch of basil was put on the pillow of the newborn baby, until death, when it was planted on the grave site." In Bulgaria, basil is the only multipurpose plant in the family rites (birth, marriage, and death); it marks the period of transition and its usage in rites with water and fire confirms the cleansing function of this plant (Sirakova and Dimitrova 2003). In Romania, it is "one of the most important plants connected to the human life cycle" (Butură 1979).

Regarding rosemary, there is a belief that this aromatic plant keeps evil spirits at bay, which might otherwise exercise their harmful influence at life's important rites of passage (birth, marriage, and death) (De Cleene and Lejeune 2003; Thiselton-

Dyer 1889). Its usage in rites of passage, with roots in ancient cultures, is mainly related to Christians (Table 2A–C).

On the other hand, one of the most popular plants against the evil eye in Israel, as dried leaves or as incense, is the three-lobed sage (Dafni et al. 2006; Dafni and Khatib 2017). The reasons for its use are as follows: "it expels the Satan and the evil eyes ... by placing three-lobed sage on the graves, a connection is sustained from birth to death ... the three-lobed sage accompanies man in all stages of his life" (Dafni et al. 2006). At every wedding, and at any other family feast, incense of three-lobed sage leaves is placed on burning coals. It is used against the evil eye and to expel demons (Dafni et al. 2006). Apart from Israel and connected with the protective reputation of this species, in Greece, the plant is sometimes set on fire in a house to cleanse it (Huxley and Taylor 1984). This protective reputation can be the cause of the tradition of planting *S. fruticosa* around houses in the country near Cartagena, Spain (Rivera et al. 1994).

Considering the concept of vulnerability to external dangers during rites of passage, and the virtue of all the mentioned species to protect against the evil eye (Table 1), this may explain the use of all of these species in the ceremonies of childbirth and circumcision, wedding, and funerals. All of the abovementioned plants are known in different cultures and religions as apotropaic.

THE PLANTS IN RELIGIOUS BELIEFS AND OFFICIAL CEREMONIES

As mentioned in the introduction, myrtle has a regular, official role in Judaism (Fig. 1a) and Mandaeans' ceremonies. Without such an official role, Christians use it for ornaments and decorations in religious fests and processions, and to decorate the traditional nativity scene in Spain, Portugal, and Greece (Table 3).

Basil is widely used especially in the Greek Orthodox Church at Exaltation of the Holy Cross on September 14th (Fig. 1b) to which basil is dedicated (Table 3, see above). In Serbia, basil and its pleasant perfume symbolizes the benediction of the Holy Spirit (Stevanović et al. 2014). According to Tasić (2012), the motive for using basil in church rituals is because it is considered "a flower dearest to folk." In Spain, basil is used as an ornament in several religious fests and processions, and its use seems to be of relatively recent origin (post-Muslim period) and was incorporated into medieval Christian practices

TABLE 3. THE USE OF MYRTLE, BASIL, THREE-LOBED SAGE, AND ROSEMARY IN (OFFICIAL) RELIGIOUS CEREMONIES

Religion/plant	Ancient religions	Judaism	Christianity	Islam	Others
Myrtle	Ancient Greece: Baumann (1993:51); Connors (1997:307); Folkard (1884:454–455); Kearns (2009:251,315); Larson (2007:37); Maxwell-Stuart (1972:passim); Rogić et al. (2012:347) Ancient Rome: <i>Crowns ovations and triumphs</i> —Plinius (HN 15.125; Beard (2009:113.63); Catabiani (1996:350); Gerola et al. (1962–1963:53); Staples (1998:110) Ancient Persia: <i>In sacrifices and to cover the ground in celebrations</i> , Tardio et al. (2018:270)	Judaism: <i>Essential in Sukkoth, (Tabernacle) festival since antiquity</i> —Babylonian Talmud, Sukkoth: (12a.32b–33a.45a); Leviticus (23:40); Schaffer (1982:passim)	Portugal: <i>Madeira; Church decorations</i> —Pratt (1840:101) Spain: <i>Ornaments and decorations in religious feasts and processions—decoration of nativity scene</i> : Carrió (2013:505–6); Cobo and Tijera (2011:188); Conca and Oltra (2005:81); Galán (1993:201); Muntané (1994:385) Greece <i>Decoration of the church feasts; the branches are given to the believers</i> : Megas (1956:176); <i>Component of the Holy Oil</i> , Menevisoglou (1972:34,38,39) Cyprus: <i>Exaltation of the holy cross (on September14th) and other festivities (decoration, blessing, Holy Water)</i> —Hadjikyriakou (2007:305) Greece: <i>Exaltation of the holy cross (on September14th) and other festivities (decoration, blessing, Holy Waer)</i> : Markantonis et al. 2006:32) Israel and Palestine: Dafni and Khatib (2017:96–97); Drower (1956:88) Poland: <i>Catholic Church; Bouquets in the Assumption Day</i> —Łuczaj (2011:8) Romania: Kołodziejka-Degorska (2012:297) Serbia: Stevanović et al. 2014:246); Tasić (2012:74) Spain: <i>Catholic Church; Ornaments and decorations in religious feasts and</i>	Syria: <i>Decoration of Shiite's shrines in Festival</i> —Musselman (2007:200)	Mandaeans: <i>Iraq</i> , Aldihisi (2008:34,35,464); Buckley (2002:passim); Drower (1937:passim) Zoroastrians: Herodotus 1922 (1.132); Strabo 1857 (XV. III, 14); Kohut (1898:passim); Philpot (1897:13); Ramsay (1730:73)
Basil					

(Continued)

TABLE 3. (CONTINUED).

Religion/plant	Ancient religions	Judaism	Christianity	Islam	Others
Rosemary			<i>processions</i> —Blanco and Cuadrado (2000:43); Carrió (2013:512); Pellicer (2000–2004 1:157); Velasco et al. (2010:357); (C. Blanché Pers. obs.).		
			Cyprus: <i>A component of the Holy Oil</i> —Hadjikyriakou (2007:291); <i>in fests</i> —Hadjikyriakou (2007:291); <i>decoration of the Epitaph on Holy Friday</i> —Hadjikyriakou (2007:291)		
			England: <i>Christmas and church decorations</i> —Pratt (1840:5657); Northcote (1903:131); Rohde (1922:74)		
			Greece: <i>Decoration of church in Fests and giving them to the believers</i> (Markantonis et al. (2006:38); <i>sprinkling of Holy Water</i> —Argenti and Rose (1949 1:187); <i>preparation of the Holy Oil</i> —Menevisoglou (1972:39)		
			Spain: <i>Decoration in religious fests and saints' processions</i> —Blanco and Cuadrado (2000:122); Bonet (2014:213); Cobo and Tijera (2011:188); Consuegra (2009:165); Criado et al. (2008:55); Fajardo et al. (2007:121); Mulet (1991:384); Panda (2008:858)		
Three-lobed sage					

from the 16th century on (Alcover 1975). In the Holy Land, the plant is also used in the baptism ceremony (Fig. 1c), where water is sprinkled with a bunch of basil. In Spain, many celebrations with a religious basis (although syncretic/mixed with other folk traditions) include the use of basil as a good luck wish (Carrera, 2009; Pellicer 2000–2004).

Several species of basil, especially *tulsi* (*Ocimum sanctum*), are regarded as the most sacred plants in the Hindu religion, and therefore basil (*tulsi*) is found in almost every Hindu house throughout India (Rai 1992). The leaves are used for different ceremonies (including births and weddings) and sacred rituals, as well as in funerals (Chaudhuri and Pal 1997; Simoons 1998). The explanation is that “the wind that carries the aroma of *tulsi* spreads purity wherever it blows. It may also be cultivated at burial places” (Rai 1992). Therefore, it seems reasonable that *O. sanctum*, which does not grow in the Middle East and Europe, was replaced by *O. basilicum* for almost the same ritual uses (Table 3) and was also incorporated very early by the Greek Orthodox Church. Simoons (1998) had already mentioned, concerning basil vs. *tulsi*, “... one cannot ignore the striking parallels between India, Iran, and Mediterranean lands in the association of basil with love and marriage. He also added: “Recalling the widespread Hindu use of holy basil in connection with death and burial are reports of similar associations for sweet basil in lands of the west.”

Due to the legends that relate rosemary to the Virgin Mary and Jesus (see above), the plants are widely used, mainly as a decoration, especially by the Catholic Christians in Spain (Fig. 1e) and the Greek Orthodox Church in Greece (Table 3). The ritual use of rosemary in rites of passage (Table 2B–C) could be viewed as a continuation of classical customs and it was, supposedly, intensified as a result of the “Christianization” of the plant somewhere in the Middle Ages in relation to the legends relating it to the Virgin Mary and to Jesus (Crump 2013; Rättsch and Müller-Ebeling 2006).

The three-lobed sage is called “blessed” in Arabic. The source of the Arabic name (*Miramyieh*) is a legend telling of Mary on this same flight to Egypt, her son in her arms. In the heat of the day, when Mary sat to rest under the three-lobed sage bush, she picked some leaves and with them wiped her perspiring face. Mary was refreshed by their good scent and she blessed the plant; since then, it has been called after her. Another version is that “she had a pain in her belly; then she placed a three-lobed sage leaf in her mouth and she felt relief. Since

then the plant has been named for her” (Dafni and Khatib 2017). The ritual uses of *Salvia fruticosa* is, so far, a local tradition, which is limited to Muslims in the Holy Land. All of the uses are related to popular customs but not to any official ceremony.

ASPECTS OF SYNCRETISM

Plants are used ritually from very ancient times in relation to broader religious concepts relating to “life, or to the world, the underworld, or hereafter” (Simoons 1998). No one can ignore that “the overwhelming importance (of plant use) in those ritual relationships was a desire for good health and prosperity; a fear of violence, evil, impurity, death, and decay; and concern with one’s prospects after death” (Simoons 1998). Due to the specific characteristics and uses of these plants, it is not surprising at all that “a new religion may ... take over ritual uses of plants” (Simoons 1998). Thus, it is very logical to assume that new religions adopt old, already “proven” plants, or use plants having similar properties. Classen et al. (2002) already mentioned that just as aromatics traveled to Greece and Rome from the East, there is no doubt that many aromatic customs also came via the same geographic route. The ritual use of *Ocimum sanctum* in Asia and *O. basilicum* in the Mediterranean (the logical substitute) could also have had the same route.

All four aromatic species are related to Heaven and Paradise in the different religions, probably due to their sweet odor, purification abilities, medicinal value, evergreen qualities (except basil), and symbolism and/or use as incense (see above).

According to our results, myrtle is the most widely used ritual plant in rites of passage and ceremonies through time, regions, and religions. The Babylonian Talmud relates paradise as a “garden of myrtle” (Babylonian Talmud 1860–1880, Tractate Shabbat, 104a). According to the legends of the Kabbalists, myrtle has the power to dispel even the stench of Hell (Yalkut Shimoni, Genesis, paragraph 20). Westermarck (1933) mentioned that “*Barakeh* (a divine blessing) is ascribed ... to the myrtle, which has the scent of paradise,” and in another place, “the laurel and the myrtle are holy ... leaves or twigs are boiled in water, and with this water, mixed with Moorish ink, charms are written for various purposes.... The myrtle has the scent of Paradise, liked by the angels” (Westermarck 1926). The Prophet Muhammad is reported to have said that Adam fell down from Paradise with three things: the myrtle, which is the chief of sweet-

scented flowers in this world; an ear of wheat, which is the chief of all kinds of food in this world; and pressed dates, which are the chief of all fruits of this world (Elgood 1962; Goodwin 1988; Littell and Holden 1838). A Muslim tradition holds that Mohamed’s sword was made of the leaves of the myrtle of Paradise and brought down to earth by Adam (Sezgin 1967). This tradition reflects the story about Moses’s stick, which is also said to have been made of the myrtle (Sezgin 1967; Wheeler 2002). Of the three main religions, Christianity has the least relationship with this plant, except in some areas, such as for weddings and funerals, and concerning some official religious ceremonies.

The sacral aspect of basil can be exemplified by a Serbian legend, which states that Paradise is full of basil, or by the popular Serbian proverb, which says that “the soul of a good man smells like basil” (Tasić 2012). Similarly, *O. sanctum* in India is “... the meeting point of heaven and earth” (Gupta 1971). “The tulsi is, as is said, on earth, in paradise, and in the netherworlds difficult to obtain.... Whoever merely sprinkles a single drop of water on the tulsi, he shall reach, freed from all sins, paradise” (Gupta 1971). The possible relations of the ritual use of both *Ocimum* species were previously exposed, but those with regard to myrtle were not. According to the review of Marwat et al. (2011), many of the commentators of the Quran identified the *Ar-Rehan* (Sura 55. *Ar-Rahman*, *Ayah* 10–13; see Farooqi 1992) as *Ocimum basilicum*. As a plant mentioned in the Islamic sacred text, one should expect some more ritual uses in this religion than the only mention in Yemen for weddings

(Table 2B). But the Arabic name for *Ocimum* spp. and *Myrtus* are similar: mainly *rayhan* for the first and *rihan* for the second (Boulos 1983; Leclerc 1877–1883), other authors used *rihan* for both (Ghandi and Husain 1994), meaning “the aromatic.” This may have led to the Spanish vernacular name for myrtle—*arrayán* (from *al-rihan*). In our opinion, the similar name in Arabic can be an explanation for the frequent employment of myrtle and the lack of use of basil in Muslim rites of passage. The old tradition of both plants could have merged into one.

In the case of rosemary, we know of its use since ancient times as a substitute for incense (Grieve 1931; Hadjikyriakou 2007), which is still being practiced in some churches, sometimes not only as incense but also as an (aromatic) ornament in important ceremonies (Tables 1 and 3). Starting with some ritual uses in ancient times related to weddings and burials, the plant was later Christianized (Rätsch and Müller-Ebeling 2006) and became an important symbol of this religion in some territories. With minor uses in Islam and Judaism, it remains more or less related to Christian churches.

On the other hand, in some Muslim territories, the most important cemetery plant is the three-lobed sage. When locals were asked why they used this plant in cemeteries they answered the following: (1) “The angels like a good odor and come to the fragrant plants, and they also transfer the prayers to the dead. When a person is deceased, the angels come to visit him and they like good odor—that is why we put *Salvia* there” (Dafni et al. 2006). This note is related to the common belief that angels go to argue with













	Myrtle			Basil			Rosemary			Three-lobed sage		
												
Good-luck, disease protection												
R.P.: Birth - circumcision												
R.P.: Weddings												
R.P.: Death, funerals												
Religious ceremonies												

Fig. 2. The use of myrtle, basil, rosemary, and three-lobed sage in several rituals among the main monotheistic religions of the Mediterranean basin, sorted chronologically by its appearance (Judaism, Christianity, Islam). Light gray for few (two or less) references, dark gray for well-documented uses. R.P.: Rites of passage.

the dead person in his grave (Granqvist 1965). This plant seems to be ritually important only for Muslims living in the Holy Land.

Conclusions

The four aromatic species are all well known as odoriferous, medicinal, and apotropaic. The use of these four aromatic plants (*Rosmarinus officinalis*, *Myrtus communis*, *Ocimum basilicum*, and *Salvia fruticosa*) in rites of passage is found in all the monotheistic religions (Fig. 2) and is related to the expulsion of the evil eye/bad spirits/Satan, etc., in these critical stages in the human life cycle. These customs have deep roots in ancient pagan cultures.

The use of aromatic plants in official religious ceremonies shows that different plants are currently related to different religions: myrtle to Judaism, basil to the Greek Orthodox Church, and rosemary to the Catholic Church, with some minor overlapping. The Muslims and the Druzes have no official religious use of aromatic plants. It is noteworthy to mention that while myrtle is a compulsory part of the Sukkoth Jewish celebration and basil is a main component of the Exaltation of the Cross in the Greek Orthodox Church, rosemary is used mainly as decorum in various Christian churches. The use of the three-lobed sage ritual is found in local customs but by no means is it a part of established ceremonies.

While all four plants have similar uses in different regions/religions, it seems that these plants can be used for very similar ritual uses, probably as a result of cultural migration of customs and syncretism.

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