

MEDICINAL PLANTS IN SAMNIUM POPULAR MEDICINE

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Summary

An ethnobotanical survey was carried out in the year 2007, in the Samnium territory, in the North-East of Campania, that appears have a very rich and interesting ethnopharmacologic traditions. The information recorded has been collected by interviewing users of medicinal plants, for which such plants represents a personal patrimony uninfluenced by other sources. Fifty-four species, claimed as medicinal and belonging to thirty-one families, have been reported.

Key words: popular medicine, medicinal plants, Samnium

Introduction

The Samnium territory, whose boundaries in past times reached Abruzzo, Lazio and Apulia, can be nowadays identified with the Province of Benevento, which is settled in the North-East of Campania and with its 2.071 Km² represents the 15.2% of the whole regional territory.

The main part of the province is included within the Medium and Low Calore basin, whereas in the north-east part it bends towards the Fortore river with the west side of Mount Taburno sloping down towards Volturno Valley.

The peculiarities of the territory favoured the development of a wide floral biodiversity among which a high percentage is formed by medicinal species. The floristic list of Samnium medicinal flora includes no fewer than 379 species grouped in 56 families which are mainly formed by autochthon plants (1-3). The biological spectrum reports a high number of hemicriptophytes, whose value is equivalent to the 40.7%, whereas therophytes account for 21.1%.

The percentage of geophytes is 12.6% and it is peculiar of the Samnitic continental territory. The considering prevalence of this biological form is represented by several undergrowth species (3).

The huge presence of medicinal herbs gave life to a wide popular pharmacopoeia (2, 4). A lot of wild species came to be used by the local population for their healing properties, as they were also easy to be found described in academic medicine. The use of remedies made with medicinal herbs present on the territory is commonly associated with rites, peculiar gestures and prayers, the sign of a strong influence of the magic-ritual element (4-5).

Methodology

The research and identification of the different medicinal species was carried out along a period included between May and July 2007 and ethnobotanical information on the uses of plants were gathered through semi-structured and structured interviews with persons, who still retain traditional environmental knowledge. In the first phase of the field study, people were asked to freely recall all medicinal plants and other natural remedies that they use or have used in the past. More specific information was recorded later by using structured interviews in which a specifically developed questionnaire is completed.

People were asked to describe the method of use and preparation of the folk medical remedies for each folk taxon quoted. During the interviews, several fresh plant specimens or dried samples stocked in a small transportable field herbarium were shown to the interviewees. If a plant is quoted without having any reference in the herbarium, the informant is followed in the field and invited to show the mentioned species (6). The ethno-botanical data for this work are the result of both several interviews with the people living on the territory, and bibliographical researches carried out using local authors texts (1, 3, 7).

The informants interviewed numbered 140 (50 men, 90 women), whose ages ranged from 50 to 95 and who belonged to families which had strong links with traditional activities of the area. Most of the interviewees (90) were over 60 in age, of whom 30 were between 60 and 69, 32 between 70 and 79, 26 between 80 and 90 and two over 90 years old. According to an original anthropological observation, women are depositaries of the 'curative secrets' of plants, a fact that becomes even more significant when we consider that lands dedicated to gardens and the showing of cereals are inherited through the female line, while only flocks descend through the male line. Among the informants, fifteen were farmers, while the remainder mainly building workers, restaurateurs, shepherds and housewives. They had all been living in the area under study for many years.

For each plant we collected herbarium specimens then pressed, labelled, dried and deposited in the Herbarium of the Medicine Botany Chair at The University of Salerno. Plants were identified based on the text *Flora d'Italia* (8).

Results

For each plant, the following information is provided: family, plant binomial, vernacular name if present, uses and prescription.

AQUIFOLIACEAE

Ilex aquifolium L.

A leaf decoction is used for its febrifuge, antiarthritic and antirheumatic properties. This formulation is to be preferred to the bark decoction which possesses, anyway, the same uses. The fruits are claimed to have a laxative effect.

ADIANTECEAE

Adiantum capillus-veneris L. (capille 'e viento)

The leaves, thanks to their menstrual restoring properties, were used for sedative and disintoxicating decoctions. The same plant parts are also administered in post-partum to restore their menstrual flux. Moreover, it could be used to cause abortion.

APIACEAE

Apium graveolens L. (accio)

A leaf decoction is used in case of pharyngeal and bronchial catarrh. The juice of the fresh plant is claimed to be an antiscorbutic and possess a diuretic action.

Foeniculum vulgare Miller (finocchio selvatico)

A root decoction is used for its digestive properties and, with lettuce leaves, it is used as a gastric antispasmodic. It is also claimed to be an emmenagogue and to stop the milk flux in women. The same formulation is also used in the treatment of respiratory infections thanks to its expectorant action.

Petroselinum sativum Hoffm. (petrosino)

A concentrated decoction of this plant is used in past times to cause abortion. The powdered leaves had a great effectiveness as a decongestant for bee and wasp bites. Its powdered leaves together

with *Parietaria officinalis* L. and *Senecio vulgaris* L. plants, are used in case of burns. Leaves in oil and salt is used to obtain and immediate relief in case of toothache when put directly in the oral cavity. A poultice of powdered leaves, applied topically, is claimed to stop milk flux in nursing mothers. A decoction of roots and leaves, drunk the day after preparation, is claimed to restore the organism weakened by malaria.

ASPLENIACEAE

Ceterach officinarum DC.

A poultice of powdered fresh leaves is used topically as an astringent and anti-inflammatory on reddened and pustulous skin.

ASTERACEAE

Bellis perennis L. (pratolina comune)

In traditional medicine poultices obtained with daisy leaves are thought to be a remedy for bruises, sprains, wounds and pimples.

Cichorium intybus L. (cicoria)

Chicory roots and leaves are used in the preparation of a decoction to be used against spastic colitis. A root decoction is claimed to have mild laxative effects.

Matricaria camomilla L.

The infusion obtained by camomile heads is used as a mild sedative and, together with elder, it is a remedy against cough and breathing inflammation. Camomile decoction, together with lettuce and elder, is given to parturient as an antispasmodic, an intestinal refresher and an antineuralgic. It is also used externally as a skin and eyes anti-inflammatory.

BORAGINACEAE

Anchusa officinalis L. (lingua di bue)

Leaves and flowers are desiccated in summertime and preserved for winter, when respiratory inflammations and fever made its use essential, thanks to the expectorant and diaphoretic effects they show in infusion. A decoction of its leaves is also used in the treatment of rheumatic and arthritic pain.

Borago officinalis L.

Leaves and flowers represent the drug. The plant is claimed to have diaphoretic and diuretic properties, and cardiotoxic action. Leaves, moreover, are still used as a digestive and a mild laxative to favour the motion of the bowels as they promote peristaltic movements. A decoction of flowers is used as an antitussive.

Cynoglossum officinale L. (lingua di cane)

A decoction of root is used in ancient times for its sedative effects, whereas today it is only used for its emollient, lenitive and astringent properties. Powdered leaves are used topically for same purposes, wounds and burns.

Pulmonaria officinalis L.

The use of leaves to prepare infusions is justified by its antitussive properties. The plant is also used in case of hoarseness and voice lowering.

BRASSICACEAE

Brassica nigra Koch (cavolo nero)

Its seeds are rich in oil and they are used topically every time it is necessary a strong revulsive action, for cataplasms and foot-baths.

Capsella bursa pastoris Medicus (borsacchia)

An infusion of dry plant is administered post-partum as and antihæmorrhagic, to avoid uterine hæmorrhages.

CAPRIFOLIACEAE

Sambucus nigra L.

A decoction of inflorescences is claimed to be effective in treatment of bronchitis and, together with camomile and lime-tree flowers, this formulation is used to treat wasp, bee and hornet bites. The trunk bark, once powdered, is used to treat gout, applying it on the painful parts.

CARYOPHYLLACEAE

Saponaria officinalis L. (erba saponella)

A root decoction is claimed to be an antitussive. Besides, it is used as a substitute of soap for its capacity to produce foam.

Stellaria media L.

A poultice of aerial parts is used as a topic anti-inflammatory in case of wounds and bruises. The juice of the fresh plant is claimed to possess galactagogue properties.

CONVOLVULACEAE

Convolvulus arvensis L.

Roots and leaves are employed for their cholagogue, diuretic and laxative properties.

CRASSULACEAE

Umbelicus rupestris Dandy

Its squashed leaves, thanks to their emollient and abscess solving effects, are applied on corns and callosity.

DIPSACACEAE

Dipsacus fullonum L.

This plant is claimed to have depurative properties. The roots were used in decoction to stimulate perspiration and diuresis.

FUMARIACEAE

Fumaria officinalis L.

The aerial parts, applied topically, are claimed to be effective in treatment of herpes eruptions.

GENTIANACEAE

Gentiana lutea L (genziana maggiore)

The aerial part of the plant are used to prepare infusions in cases of anaemia and fever.

LAMIACEAE

Lamium album L.

A decoction of the aerial parts is claimed to be an antihæmorrhagic. A decoction prepared with the plant root, wheat, oat and barley grains, is used to counteract uterine hæmorrhages.

Mentha suaveolens Ehrh. (mentastr)

The squashed aerial parts are used topically as an anti-inflammatory in case of rheumatism and arthritis. A root decoction is considered a refresher of urinary tract.

Origanum majorana L. (oregano)

Topically, the squashed aerial parts are used as a decongestant for small abscesses and bruises.

Origanum vulgare L. ('regana)

The small pulverized flowers are largely used on newborn babies' irritated skin, thanks to its antiseptic action. The sedative effectiveness is exploited in the case of toothache, where pulverized leaves are introduced in the decayed tooth cavity; the same use is obtained with the oil in which the oregano has been previously soaked.

Salvia officinalis L.

An infusion of leaves, sweetened with honey, show balsamic and expectorant effects. Fresh leaves were also used as an oral antibacterial.

LAURACEAE

Laurus nobilis L. (lauro)

A leaves decoction is used for its expectorant properties, namely in cold. An infusion of the same parts is also used as an aromatic and a stomachic. It is also used to flavour food.

LILIACEAE

Allium sativum L.

Garlic have different applications: a bulb infusion is used as an anti-helminthic and a febrifuge.

LORANTHACEAE

Loranthus europæus Jacq.

The ripe fruits are used to prepare a jam with an agreeable taste and light astringent action.

Viscum album L.

The fresh leaves are used in form of infusion to lower blood pressure. A leaf decoction is used to stimulate blood circulation.

MALVACEAE

Althaea officinalis L. (malvone)

A decoction of roots is claimed to be useful in the treatment of cough and bronchitis, and as a digestive. Topically, the same formulation is employed as an oral anti-infective and as a decongestant for wounds and pimples.

Malva sylvestris L. (malva)

A decoction of mallow leaves and flowers is used in popular medicine as an antitussive. A root decoction, with lettuce and camomile, is claimed to possess refreshing, astringent and anti-inflammatory properties. Topically, this decoction is used as an antihæmorrhoidal. Cooked mallow's compresses favoured dental abscesses absorption if applied directly on the interested part.

PAPAVERACEAE

Papaver rhoeas L.

An infusion of dried petals is used for its antitussive, narcotic, sedative and bronchus-sedative properties.

POLYGONACEAE

Rumex acetosella L. (lampazzo)

Its leaves are warmed up, greased with oil and put on pimples to help them solve. A leaf infusion is used as an oral anti-infective.

PORTULACACEAE

Portulaca oleracea L. (erba vesciulella)

Fresh leaves are claimed to have an emollient action if put on corns, and an anti-inflammatory effect on wounds.

RANUNCOLACEAE

Clematis vitalba L. (vitacchia)

Leaves are applied topically as an anti-inflammatory in case of neuralgia and rheumatic pains. Shoots are also eaten boiled, dressed up with lemon.

Nigella damascena L.

The plant seeds are particularly fragrant and they were used to flavour sweets and liqueurs.

ROSACEAE

Crataegus oxyacantha L.

A flower infusion is used in treatment of hypertension and as a mild sedative. Berries were used to prepare an infusion that is used in case of toothache.

Fragaria vesca L (morello)

A leaf infusion is claimed to be an appetizer. Topically, the leaves are used as a decongestant for wounds.

Rosa canina L. (rosa selvatica)

An infusion of fresh or dried petals is claimed to act as an anti-inflammatory and is employed for eyes washings in case of conjunctivitis. A decoction of fruits is used as an intestinal astringent in case of diarrhoea.

Rubus ulmifolius Schott. (rovo)

A decoction of fresh leaves is used against sore throat. Leaves in oil are used topically for decongestant cataplasms in case of pimples, burns, abscesses and all skin inflammatory processes.

Sanguisorba minor Scop (salvastrella)

The infusion made with the aerial parts of the plant, is used for its astringent properties against intense and chronic intestinal infections.

RUTACEAE

Ruta graveolens L (ruta comune)

The whole plant is harvested during its bloom period and is employed to prepare an infusion with antihelminthic properties. The same preparation is claimed to be an abortive.

SALICACEAE

Salix alba L. (salice)

An infusion of willow and olive leaves is used as a febrifuge in malarial fevers.

Salix purpurea L. (salice muzzillo)

An infusion of leaves is used as a febrifuge. A cataplasm obtained from powdered trunk bark is used as an anti-inflammatory.

SOLANACEAE

Datura stramonium L.

Dry leaves were smoked as an antiasthmatic.

Solanum nigrum L. (morella)

Ripe berries were crushed in the decayed tooth cavity for their odontalgic activity.

TILIACEAE

Tilia platyphyllos Scop.

An infusion of flowers is claimed to be very effective in the treatment of respiratory diseases. The same formulation possess diuretic, antispasmodic, diaphoretic effects.

URTICACEAE

Paritaria officinalis L. (paritaria, erba 'e muro)

This plant is one of the most important medicinal plants used in Samnium. The aerial parts are used for anti-inflammatory and decongestant cataplasms. A decoction of the same parts, when drunk on an empty stomach, is claimed to be effective as a gastric antispasmodic.

Urtica dioica L.

A cataplasms of fresh leaves is used topically as an antirheumatic. Internally, the same formulation is used in the treatment of cystitis.

VERBENACEAE

Verbena officinalis L.

An infusion of inflorescences and leaves is used as a febrifuge.

VIOLACEAE

Viola arvensis Murray

A cataplasm of the whole plant is claimed to be effective to treat milk crust, burns and several skin diseases.

Conclusions

Popular medicine represented a relevant aspect in past daily life, besides being a characterizing element in the development of the identity of a specific culture and territory. Popular medicine, in fact, is defined by a complex mix of empiric remedies, fruit of a hundred-year experience and result of customs and tradition, magic remedies and beliefs connected to superstition and popular religion. The rural knowledge of Samnite countrymen resulted from a long experience protracted in time, from which they were really able to take advantage. They learned to recognize and use a lot of herbs present on their territory and to distinguish the good from the poisonous ones, deriving benefits from their medicinal properties.

The study has permitted us to document the traditional knowledge on medicinal plants of the area and to witness, still today, a certain wealth of ethnobotanical information, especially that obtained by interviewing the elderly. The relative isolation of the territory has permitted traditions to be fairly well preserved, which elsewhere have been lost. In most cases, their applications can be considered rational in light of modern chemical and pharmacological data. During the search, several and various cures and remedies have emerged. The main part of them is based on the use of spontaneous medicinal species, principally herbs, while the use of tree species is less frequent. Herbs were previously desiccated so that they could be used all year long in case of illness. Desiccated drugs were used following the traditional formulations, i.e. decoction, infusion, tincture, depending on which part of the plant is used. A lot of plants reported in this work are employed in breathing apparatus diseases, as anti-inflammatories, as sedatives, in case of wounds, as febrifuges. In most of cited cases, the uses reported are similar to those reported in ethnobotanical literature concerning the Southern Italy (9-18); only in few cases, the uses cited are new or characteristic.

Ethnographic, ethnobiological, and ethnopharmacological surveys dealing with traditional Mediterranean uses of plants and several aspects of folk medicines could represent the start for the increase of that kind 'rediscovered' data concerning on eco-sustainable interdisciplinary projects involving biological conservation, and, most importantly, the conservation of local culture heritage.

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