

Ethnopharmacobotanical research in Salento (South Apulia, Italy). First contribution

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Abstract. The present work is a first stage of an ethnopharmacobotanical survey which aims at documenting the present and past use of some plants in the folk medicine of the Peninsula Salentina (Apulia, Italy). The majority of the information was obtained by means of "door to door" interviews and meetings with numerous local elderly people. For each plant the authors indicate the place where interviews were carried out, vernacular names, parts employed, therapeutic properties, the way people used to employ it, and any observation and information useful to the aims of the research.

Riassunto. Il presente lavoro è una prima tappa di una indagine etnofarmacobotanica che documenta l'uso delle piante nella medicina popolare della Penisola Salentina, in particolare della Provincia di Lecce. Le principali informazioni sono state ottenute con interviste "porta a porta" e nel corso di incontri con un gran numero di persone anziane del posto. Per ogni pianta vengono indicati il luogo in cui sono state condotte le interviste, i nomi dialettali, le parti utilizzate, le proprietà terapeutiche, il modo di utilizzo e di somministrazione ed altre osservazioni ed informazioni.

Key words: Ethnopharmacobotany, Folk medicine, Italy, Lecce, Salento

INTRODUCTION

This work can be considered a first step into a wider research that aims at documenting the uses of plants in the traditional popular medicine in the area of Salento, South Apulia (Italy) (Fig. 1). The research has been carried out especially in the Province of Lecce, where there are very few written documents on this subject. The area taken into account is characterised by a flat territory whose only elevations are represented by the Serre Salentine (about 200 msl).

In Salento, many different kinds of habitats occur (pseudo-steppe, garigue and dwarf shrub communities, maquis with scrub vegetation, holly oak forest, dune foreshore communities, rock and calcareous cliff vegetation, wetland and agricultural lands); as a consequence, the region has a very rich flora, of about 1400 vascular plant species.

In Salento as well as in all the Apulia area, ethno-botanical studies have been very few. However, hints on the uses of some plants can be found in numerous works, such as those descri-

bing local flora (MARINOSCI 1870), dictionaries of vernacular words (RHOLFS 1956; SELVAGGI 1950; LONGO 1931), pamphlets of "popular wisdom" on natural medical remedies (DE MATTEIS 1994) or even in anthropologic works (DE MARTINO 1961; DE SIMONE 1997); the most relevant organic information on the officinal flora can be found in CASTALDO (1963) and AMICO (1973, 1974, 1975).

CASTALDO (1963) described 90 species, reporting for each of them the vernacular name, the habitat and local folk use as "listened by the informants"; no mention of the research methods employed by the author is reported. AMICO (1973, 1974, 1975) grouped officinal species according to their therapeutic uses. Beside a brief description of the plants, the author reports vernacular names, the habitat, the part used, active principles, the therapeutic action, and the place where they can be found in Apulia, but he does not mention research methods employed. A more recent work (FRIGINO *et al.* 1999) on the healing plants in Salento reveals the existence of 48 species employed for this purpose.

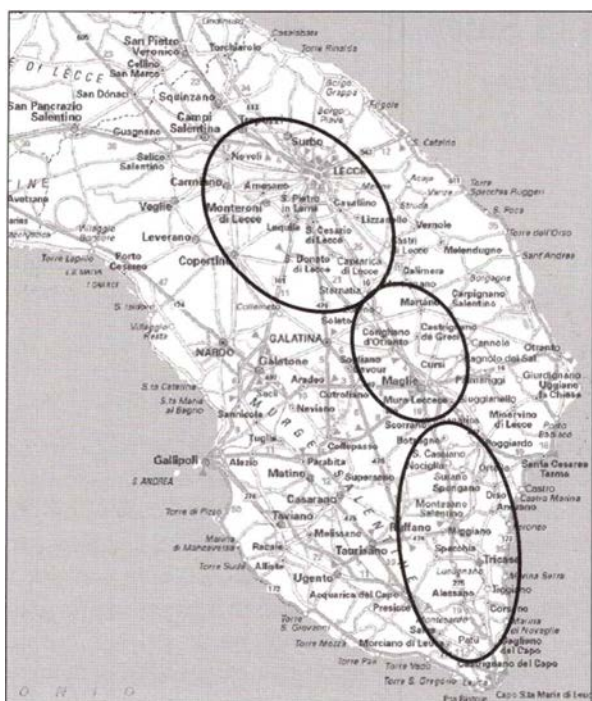


Fig. 1 - The areas of study in the Province of Lecce (Apulia, Italy)

MATERIALS AND METHODS

The majority of the interviewees were elderly people. As far as the methodology is concerned, the authors employed both the ethno-farmabotanical method indicated by WALLER (1993) and the advice on the treatment of oral source material suggested by PORTELLI (2000).

Interviews were carried out in the following three areas: a) the immediate outer areas of Lecce, including the small towns of Surbo, Monteroni, Carmiano, Novoli, and Cavallino; b) the villages of Borgagne, Serrano, Martano, Zollino, Cannole, and Cursi, located nearby the so called "Grecia Salentina", where an old dialect of Greek origin is still spoken by the elder; c) the South-East Salento, including the villages of Muro Leccese, Lucugnano, Montesano, Miggiano, Ruggiano, Uggiano, Vignacastri, Marittima, and Corsano.

The research includes one hundred "door to door" interviews. The average age of the informants was around seventy, and most of them were women with no or very low education; almost all of them were linked to the rural culture.

In order to collect a wider and more representative sample of survey, the authors, with the help

of the Pro Loco (local organization committed to the conservation and the promotion of the territory) of Marittima, Surbo and Lucugnano, arranged a series of meetings on the topic (the use of plants in traditional medicine). Many natives of high age classes attended the meetings and their most interesting experiences have been recorded.

The collected data have been arranged in records according to the alphabetical order of the medicinal plant species examined. In each plant record, the authors indicate the place where interviews were carried out, the vernacular name of the plant, the parts of the plant employed, therapeutic properties, the way people used to employ it (decoction, cataplasm, infusion or application of fresh plant material), any observation and information useful to the aims of the research.

Medical plants have firstly been identified through the interviews to old people and then classified. Nomenclature and classification refer to PIGNATTI (1982).

RESULTS

The results show that 65 plant species, belonging to 36 families, were employed in traditional folk medicine. The most represented families are Labiatae (9 species), Compositae (5 species), Liliaceae and Solanaceae (4 species each), Apiaceae and Rutaceae (3 species each). Most of them are wild plants (69%) or at least run wild, and very few of them are cultivated.

The records, in alphabetical order, follow.

Allium cepa L.

Use recorded throughout the investigated area.

Dialect name: *cepuddha*.

Part used: bulb.

Therapeutic properties: antiseptic, decongestant.

Preparation and use: cataplasm, ointment.

Notes and observations: bulbs are crushed to mush and applied by means of tight bandage on sores, purulent blisters and pimples; the mush can be blended with olive oil and leaves of *Malva sylvestris* and warmed in order to prepare compresses. An ointment to treat sunburns was obtained by mingling ashes, olive oil and boiled bulbs of onions.

Allium sativum L.

Use recorded throughout the investigated area.

Dialect name: *aju, agghiu*.

Part used: bulb.

Therapeutic properties: anti-helminthic, antiseptic, anti-hypertension.

Preparation and use: fresh plant, decoction.

Notes and observations: The fresh juice was given to adults whereas children were given a decoction obtained by boiling the cloves in milk. Raw cloves were eaten to prevent malaria and keep the plague away. Together with vinegar, garlic was used to treat infestation of lice. Raw cloves were eaten in the morning to prevent hypertension.

Antirrhinum majus L.

Use recorded in Monteroni and Novoli.

Dialect name: *ucca de leone, chiricò*.

Part used: leaves.

Therapeutic properties: emollient.

Preparation and use: cataplasm.

Notes and observations: a cataplasm obtained by crushing some leaves was applied on abscesses and pimples. Its flowers were used to prepare delicious fritters.

Apium graveolens L.

Use recorded in Monteroni and Novoli.

Dialect name: *acciu, lacciu*.

Part used: leaves, seeds.

Therapeutic properties: diuretic.

Preparation and use: juice, infusion, decoction.

Notes and observations: both the juice from the leaves and the infusion with the seeds of celery were used to lose weight; the decoction of fresh leaves was employed to treat hypertension and as a strong aphrodisiac.

Avena sativa L.

Use recorded in Monteroni and Novoli.

Dialect name: *biaa, aina riesta, biava*.

Part used: aerial parts.

Therapeutic properties: anti-inflammatory, diuretic.

Preparation and use: decoction.

Notes and observations: the decoction was prepared by boiling the aerial parts of the plant and drunk to treat rheumatism, pain to the locomotory apparatus and gout.

Brassica oleracea L.

Use recorded in Surbo, Monteroni, Serrano, Marittima, Lucignano, and Corsano.

Dialect name: *caulu*.

Part used: leaves.

Therapeutic properties: antiseptic, cicatrizing.

Preparation and use: fresh plant.

Notes and observations: the fresh plant was applied on purulent scars; it was also used to treat scalds together to an oily-calcareous liniment.

Buglossoides purpuro-caerulea (L.) Johnston

Use recorded in Ruggiano and Salve.

Dialect name: *erba di Santa Marina*.

Part used: dried plant.

Therapeutic properties: liver disorders.

Preparation and use: decoction.

Notes and observations: the bitter decoction of dried plants was drunk before breakfast to treat liver disorders which could evolve to jaundice. In the village of Ruggiano, the species is dedicated to Santa Marina, patron saint of liver disorders which evolve to jaundice.

Calamintha nepeta (L.) Savi

Use recorded throughout the investigated area.

Dialect name: *mentàscina*.

Part used: leaves.

Therapeutic properties: analgesic, expectorant, anaemia prevention, anthelmintic.

Preparation and use: crude fresh plants, decoction.

Notes and observations: the decoction was used as suffumigation to treat bronchitis; the decoction of *Calamintha nepeta* and common chamomile were employed in the treatment of burning pain in the abdomen. Eating fresh crude leaves would treat the same ailment as well. The decoction was also given to drink when people lost their appetite and to treat anaemia, anorexia and paleness. It was believed that the plant smell alone was enough to free the sick from intestinal parasite.

Calendula arvensis L.

Use recorded in Novoli and Marittima.

Dialect name: *carienula*.

Part used: the whole plant, capitulum.

Therapeutic properties: anti-ulcer, analgesic.

Preparation and use: decoction.

Notes and observations: the decoction to treat stomach ulcers was prepared by boiling down the whole plant. When a woman was affected by menstrual pains, she was given an infusion made with the flowers a week before the menstruation.

Capparis spinosa L.

Use recorded throughout the investigated area.

Dialect name: *chiapparu, chiapparinu, chiapparata*.

Part used: bark, buds.

Therapeutic properties: appetite enhancing, anti-emetic.

Preparation and use: alcoholic decoction, decoction.

Notes and observations: the bark was soaked in alcohol, then filtered and the alcoholic decoction blended with old wine in order to reduce the alcoholic degree. This preparation was stored in bottles and given every morning as a remedy against nausea and loss of appetite. The decoction of *cucumarieddhi* (buds) of *Capparis spinosa* together with leafy branches of *Pistacia lentiscus* was employed for the treatment of toothache; it was used in oral rinses. Pickled buds are still used in cooking and as seasoning in many traditional dishes.

Capsicum annuum L.

Use recorded in Surbo and Novoli.

Dialect name: *pipaluru, pipi, tiaulicchi, pipirusu*.

Part used: fruits.

Therapeutic properties: anti-inflammatory, aphrodisiac.

Preparation and use: fresh fruits in maceration.

Notes and observations: the remedy was made by maceration of fruits in alcohol for two days. It was brushed on the part of the body suffering from rheumatism. Minced fruits blended in olive oil were also used to treat *pruticeddhi* (chilblains).

Cardamine hirsuta L.

Use recorded in Monteroni and Novoli.

Dialect name: *billeri, burraccia billari*.

Part used: the whole plant.

Therapeutic properties: anti anaemic.

Preparation and use: fresh plants, decoction.

Notes and observations: the juice obtained from fresh plants was drunk before meals as a remedy for anaemia and to treat scarlet fever.

Centaurium erythraea Rafn.

Used recorded throughout the investigated area.

Dialect name: *china resta*.

Part used: shade dried aerial parts.

Therapeutic properties: febrifuge, anti-malaria, anaemia preventing, appetite enhancing, digesti-

ve.

Preparation and use: infusion.

Notes and observations: the infusion of shade-dried aerial parts (sweetened with honey since it is bitter to taste) was given to children to enhance their appetite and prevent anaemia. The same infusion was employed as a substitute for quinine to treat bursts of malaria. Malaria was widespread throughout the territory before the reclaim of marshlands; this is the reason why old people call it *china resta*, that is, "wild quinine". An infusion of shade-dried stems put into a mug of water overnight was drunk in the morning as tonic.

Ceratonia siliqua L.

Used recorded throughout the investigated area..

Dialect name: *cornula*.

Part used: fruits.

Therapeutic properties: emollient, anti-diarrhoea, antitussive.

Preparation and use: decoction, flour.

Notes and observations: the fruits were used to prepare a decoction to treat cough; they were boiled down with flowers of *Malva sylvestris*, dried figs, almond husks, flowers of *Opuntia ficus-indica* and orange rinds; sometimes when the cough was very bad, people used to add one or two capsules of *Papaver somniferum*. The flour obtained by grinding the fruits was given to children as anti-diarrhoea.

Ceterach officinarum Willd.

Use recorded in Surbo and Marittima.

Dialect name: *spaccapetre*.

Part used: the whole plant.

Therapeutic properties: diuretic, analgesic.

Preparation and use: infusion, decoction.

Notes and observations: its dialect name, *spaccapetre* (stone breaker), underlines both the plant's habit to grow in the rocks and its medicinal use. It is believed to stimulate kidney activity and to help expel kidney stones; infusion should be drunk everyday for two months. The decoction was given to calm down menstrual pain.

Cichorium intybus L.

Use recorded throughout the investigated area.

Dialect name: *cecora resta, cicuredhra*.

Part used: leaves.

Therapeutic properties: anti anaemic.

Preparation and use: fresh plant.

Notes and observations: a salad made of *Cichorium intybus*, *Taraxacum officinale* and *zanguni* (*Sonchus oleraceus* L.) was used to treat anaemia.

Citrus aurantium L.

Use recorded throughout the investigated area.

Dialect name: *marangiu*, *maranciu*, *portucallu*.

Part used: flowers, fruits.

Therapeutic properties: analgesic, flavouring.

Preparation and use: infusion.

Notes and observations: the infusion made with flowers was used to calm stomach-ache; the rind was used to give flavour to the decoction for cough.

Citrus limon (L.) Burm.

Use recorded in Surbo and Marittima.

Dialect name: *limune*, *limone*.

Part used: fruits.

Therapeutic properties: ant diarrhoea, digestive, antiseptic, astringent, haemostatic.

Preparation and use: fresh fruit, decoction.

Notes and observations: fresh juice put into a chamomile infusion was used to treat diarrhoea; digestive problems and stomach complaints such as sickness and cramps were treated both by eating a whole lemon and with an infusion of lemon rind. A remedy for scabies was obtained by boiling in olive oil some lemon rind with leaves of rue (*Ruta graveolens* L.) and a sulfur flower; the oily liquid was filtered and applied in the morning and in the evening. Lemon juice beaten with eggs and sugar was given to treat jaundice. Drops of lemon juice were squeezed in the nose nostrils to stop them bleeding (in Novoli).

Clematis vitalba L.

Use recorded in Novoli, Monteroni.

Dialect name: *barba de capra*.

Part used: fresh plant.

Therapeutic properties: anti-inflammatory, analgesic, anti itching.

Preparation and use: ointment.

Notes and observations: the ointment was prepared by soaking the whole plant in olive oil for some time; this remedy was applied to calm down intercostal pain, neuralgia, sciatica and rheumatic pains. Another ointment obtained by mingling the plant juice and lard was used to treat vaginal itch and haemorrhoids.

Colchicum autumnale L.

Use recorded in Monteroni and Novoli.

Dialect name: *castagnola*.

Part used: bulb.

Therapeutic properties: anti parasitic, vermifuge.

Preparation and use: decoction.

Notes and observations: the bulb was boiled in milk and was given as an enema.

Convolvulus arvensis L.

Use recorded in Novoli and Monteroni.

Dialect name: *attacca pasuli*.

Part used: leaves.

Therapeutic properties: purgative.

Preparation and use: infusion.

Notes and observations: the infusion was made with leaves and drunk as purgative.

Cucurbita pepo L.

Use recorded in Novoli and Marittima.

Dialect name: *cucuzza*.

Part used: seeds.

Therapeutic properties: anthelmintic, ant parasitic.

Preparation and use: fresh plant.

Notes and observations: if someone got *verme solitario* (tapeworm), he had to eat only seeds of *Cucurbita pepo* for three days.

Cynodon dactylon (L.) Pers.

Use recorded throughout the investigated area.

Dialect name: *ramigna*.

Part used: rhizome.

Therapeutic properties: anti-inflammatory, anti-septic, diuretic.

Preparation and use: decoction.

Notes and observations: a decoction prepared by boiling the rhizomes in water for 5-10 minutes was used to treat urinary apparatus disorders and to expel kidney stones; it was also used to treat jaundice, malaria fever and rheumatism.

Delphinium halteratum Sibth. et Sm.

Use recorded in Marittima.

Dialect name: *china masculine*.

Part used: dried plant.

Therapeutic properties: febrifuge, antimalaric.

Preparation and use: infusion.

Notes and observations: the infusion made with the dried plant was used instead of quinine to treat malaria fever.

Ficus carica L.

Use recorded throughout the investigated area.

Dialect name: *fica*.

Part used: syconium, latex.

Therapeutic properties: laxative, antiseptic.

Preparation and use: decoction.

Notes and observations: the latex which comes out from leaves and *scattarieddhi* (young unripe fruits) was applied directly on the skin to eliminate warts and verrucae. The latex was also applied on teeth to treat decay.

Foeniculum vulgare Mill.

Use recorded throughout the investigated area.

Dialect name: *fenucciu*, *finucchiu*, *finucchieddaru*, *finucchiara*.

Part used: fruits and leaves.

Therapeutic properties: galactagogue.

Preparation and use: infusion, cataplasm.

Notes and observations: the infusion made with the fruits was used to increase milk production. The cataplasm, made by boiling first some barley and then by adding the *Foeniculum vulgare* leaves until all the water was dried up, was used to treat mastitis.

Hedera helix L.

Use recorded throughout the investigated area.

Dialect name: *edera*.

Part used: leaves.

Therapeutic properties: antiseptic, vulnerary cicatrizing.

Preparation and use: cataplasm.

Notes and observations: the leaves were boiled and applied as cataplasm directly on scolds and sunburns; the leaves sometimes were used together with water oil and lime to make a bandage.

Hypericum perforatum L.

Use recorded in Borgagne and Marittima.

Dialect name: *imperiu*.

Part used: flowers.

Therapeutic properties: anti-inflammatory.

Preparation and use: oily liniment.

Notes and observations: the oily liniment prepared by soaking the flowers in olive oil was rubbed on the part of the body affected by rheumatic pains.

Hypnea musciformis (Wulfen) Lam.

Use recorded in Marittima.

Dialect name: *siminteddha*.

Part used: thallus.

Therapeutic properties: vermifuge.

Preparation and use: fresh plant.

Notes and observations: some thalli were eaten to eliminate intestinal parasites.

Laurus nobilis L.

Use recorded throughout the investigated area.

Dialect name: *lauru*.

Part used: leaves and berries.

Therapeutic properties: anti-inflammatory, digestion enhancing.

Preparation and use: infusion, liniment.

Notes and observations: the infusion, prepared by pouring one litre of hot water on fifteen air-dried leaves for five minutes, had to be drunken slowly twice a day. It was employed to treat poor digestion and headache. One leaf was usually put in babies' semolina pudding to make it easily digestible. The berries, *ulie lauralure*, were first soaked into olive oil and then pounded to a thick oily liquid, which was filtered through a cloth. This liniment was rubbed on the body against rheumatism and bruises. The same liniment, brushed on swollen veins near the anus, was employed in the treatment of haemorrhoids. Throughout Salento, the leaves are utilised as flavouring agent to preserve dried figs in earthenware pots called *capas*. The decoction made of laurel leaves and common chamomile flowers was used to calm down menstrual pain.

Linum usitatissimum L.

Use recorded in Serrano and Corsano.

Dialect name: *linu*.

Part used: seeds.

Therapeutic properties: decongestant.

Preparation and use: cataplasm.

Notes and observations: the seeds were boiled in order to obtain a mash which was applied on pimples and abscesses; this mash was also applied on the abdomen to calm down pains.

Lupinus albus L.

Use recorded in Surbo and Novoli.

Dialect name: *ruppinu*, *lupinu*.

Part used: seeds.

Therapeutic properties: hypoglycaemic.

Preparation and use: powder.

Notes and observations: a ground seed of *Lupinus albus* had to be eaten every other day for a month

in order to treat diabetes.

Lycopersicon esculentum Mill.

Use recorded in Corsano and Novoli.

Dialect name: *pummidoru*.

Part used: fruit.

Therapeutic properties: astringent, antiseptic.

Preparation and use: fresh fruit.

Notes and observations: a mature tomato was applied on pimples and whitlows to let the pus out.

Malva sylvestris L.

Use recorded throughout the investigated area.

Dialect name: *marve, marva*.

Part used: fresh and dried whole plant.

Therapeutic properties: anti-inflammatory, emollient, intestinal refresher.

Preparation and use: infusion, decoction, cataplasm, fresh plant.

Notes and observations: the infusion was prepared by putting a spoon of flowers in a mug of hot water, then filtered and used as mouthwash to treat inflammations. Fresh leaves were put as cataplasm on abscesses to let the pus out. A decoction of flowers and leaves, sweetened with honey, was used to treat kidney, intestinal and bladder inflammations; it was also useful against constipation. Warm compresses made with leaves, olive oil and onion or juice of *Muscari comosum* L. were put on pimples and infected wounds in order to let the pus out. Dried flowers were used in the decoction to treat cough.

Marrubium vulgare L.

Use recorded throughout the investigated area.

Dialect name: *marrubbiu, marrugghiu*.

Part used: flowers.

Therapeutic properties: digestive, bitter-tonic, cicatrizing, slimmer, expectorant, anti hypertensive, anti meteorism.

Preparation and use: decoction.

Notes and observations: the decoction of both fresh and dried top flowers, sweetened with honey since it was too bitter, was drunk to treat gastrointestinal complaints such as colitis; it was also a slimming remedy. Together with *Marrubium vulgare*, the decoction could contain also *Thymus capitatus* and it was used to treat bad digestion and flatulence. The decoction was also a good expectorant. A good remedy for high blood-pres-

sure was obtained by filtering 200 g of leaves soaked in a litre of water (in Borgagne).

Matricaria chamomilla L.

Use recorded throughout the investigated area.

Dialect name: *capomilla, capumilla, camumilla, fiureddhru*.

Part used: capitulum, whole plant.

Therapeutic properties: antiaerophagia, anti-inflammatory, analgesic.

Preparation and use: infusion.

Notes and observations: the infusion of capitula in hot water was used to calm children's gastrointestinal pains and for insomnia and anxiety; the same infusion with some lemon juice was used to treat diarrhoea, and with some *Laurus nobilis* leaves to calm menstrual pains. Compresses imbibed with the same infusion were used for inflammation of the eyes. A cataplasm made with the flour of *Linum usitatissimum* and a spoon of flowers was used to relieve intestinal inflammations.

Mentha pulegium L.

Use recorded throughout the investigated area.

Dialect name: *mintascina, mentastra*.

Part used: aerial parts.

Therapeutic properties: anti hitching, sedative.

Preparation and use: infusion, cataplasm.

Notes and observations: the infusion was drunk half an hour before going to bed to calm anxiety and agitation and to help fall asleep. A cataplasm obtained by crushing some fresh plants was used to treat hitching. Its leaves were chewed to refresh the breath. An infusion of *menta buona* (*Mentha viridis* L.), that is to say "cultivated mint", was used to treat head ache and as a mouthwash for tooth ache.

Muscari comosum Mill.

Use recorded throughout the investigated area.

Dialect name: *ampasciulu, pampasciulu, pampasciune*.

Part used: bulb.

Therapeutic properties: antiseptic, anti-inflammatory, laxative.

Preparation and use: fresh plant.

Notes and observations: bulbs were crushed and wrapped overnight though a bandage around skin purulent infections such as whitlow; crushed bulbs were also applied on the cheeks to treat tooth abscesses.

Myrtus communis L.

Use recorded throughout the investigated area.

Dialect name: *murteddhra*.

Part used: leaves.

Therapeutic properties: antiseptic.

Preparation and use: decoction.

Notes and observations: the decoction of leaves boiled in water was used to treat sore throat.

Nicotiana tabacum L.

Use recorded in Uggiano la Chiesa.

Dialect name: *tabbaccu*.

Part used: leaves.

Therapeutic properties: antiseptic, cicatrizing.

Preparation and use: fresh plant.

Notes and observations: its leaves were employed compresses over the flour of *Linum usitatissimum* to treat scalds.

Ocimum basilicum L.

Use recorded in Surbo, Monteroni, Novoli, Montesano, and San Donato.

Dialect name: *basilicu*, *basilecu*.

Part used: leaves and top flowers, fresh plant.

Therapeutic properties: calming, sedative, anti spasmodic, digestive, anti emetic.

Preparation and use: infusion.

Notes and observations: the infusion was used to treat insomnia, to stop hiccup's intestinal pains, sickness and vertigo. Its leaves were used to prepare a good digestive liqueur. Small plants in pots near beds were supposed to keep the mosquitoes away. The plant is still used during the religious folk feast of S. Donato in Montesano Salentino; people bring bunches of basil to the feet of the statue of the Saint. According to the folk tradition the plant keeps the *guai di S. Donato* away, i.e., ailments such as epilepsy.

Olea europea L.

Use recorded throughout the investigated area.

Dialect name: *ulia*.

Part used: fruit, bark, resin, branches and leaves.

Therapeutic properties: anti-inflammatory, intestinal regulator, anti hyperglycaemia.

Preparation and use: fresh plant, oil, liniment, decoction, emollient.

Notes and observations: a spoon of olive oil before breakfast was used to regulate intestinal functions and relieve gastrointestinal complaints. In the village of Marittima the oil, together with lime

water, was used to prepare a white liniment which was applied on scalds and covered with both leaves of ivy and cabbage; this bandage was renewed once a day until complete healing. The decoction prepared with leaves was used to treat diarrhoea. Colds and sore throat were treated by spreading warm olive oil on breast and throat. A remedy made with olive oil, leaves of *Malva sylvestris* and crushed onions was applied on pimples in order to let the pus out.

Opuntia ficus-indica (L.) Mill.

Use recorded in Surbo, Marittima, and Novoli.

Dialect name: *ficatigna*, *ficarigna*.

Part used: flowers, glochids.

Therapeutic properties: lenitive.

Preparation and use: infusion, decoction.

Notes and observations: its flowers were used to prepare both an infusion and a decoction for dry cough. Its glochids *pale* without prickles were cut into slices and applied on scalds to relieve pains; they also were used as a remedy for pneumonia.

Papaver somniferum L.

Used throughout the investigated area.

Dialect name: *papagna*.

Part used: capsules.

Therapeutic properties: sedative, hypnotic, analgesic.

Preparation and use: decoction.

Notes and observations: a teaspoonful of *papagna*, prepared by boiling one capsule in a small pot of water for some minutes, was given to restless babies and children to help them sleep. Capsules (Fig. 2) were also put in the mixture to prepare a decoction to relieve bad cough. The decoction made of one poppy capsule, leafy branches of *Pistacia lentiscus* and olive trees was employed in oral rinses for toothache. Capsules with their stalks were collected when from green were turning into yellow, they were fastened in bunches and put to dry in the shade; afterwards they were stored for the year.

Parietaria diffusa Mert. et Koch

Used throughout the investigated area.

Dialect name: *erva te ientu*, *erva te parite*, *pud-drizza*.

Part used: top flowers.

Therapeutic properties: decongestant.

Preparation and use: suffumigations.

Notes and observations: a remedy for cold and allergy at the respiratory apparatus was made by boiling top flowers in water for some minutes and breathing the steam which comes out. Its leaves were rubbed on the skin of the face to eliminate comedones (Corsano).

Petroselinum sativum Hoffm.

Use recorded in Surbo and Novoli.

Dialect name: *petrusinu*.

Part used: aerial parts.

Therapeutic properties: anti-inflammatory, cicatrizing.

Preparation and use: fresh plant.

Notes and observations: compresses obtained by wrapping with paper a mixture made of bran, fresh leaves of *Petroselinum sativum* and vinegar were used to heal haematomas (in Novoli, the leaves were boiled first). A cataplasm made with leaves and stems was applied on wounds to help cicatrization.

Pistacia lentiscus L.

Use recorded in Surbo, Monteroni, Serrano, and Marittima.

Dialect name: *ristincu, frasca*.

Part used: young leafy branches.

Therapeutic properties: anti-inflammatory.

Preparation and use: decoction.

Notes and observations: young leafy branches of this shrub put together to leafy branches of olive tree were employed to make a decoction used for oral rinse against inflamed bleeding gums. The same decoction was also employed to treat haemorrhoids by means of compresses. When toothache exploded unexpectedly out of home, people used to chew some leaves of *Pistacia lentiscus* to calm it down.

Portulaca oleracea L.

Use recorded in: Monteroni, Novoli, and Marittima.

Dialect name: *brucacchia*.

Part used: the whole plant.

Therapeutic properties: diuretic, intestinal refresher.

Preparation and use: infusion, fresh plant.

Notes and observations: both the infusion and the fresh leaves eaten in salads were used for their diuretic and refreshing activities.



Fig. 2 - Capsule preparation of opium poppy.

Prunus dulcis (Mill.) D.A Webb.

Use recorded throughout the investigated area.

Dialect name: *mendula, mengula*.

Part used: seeds, husk.

Therapeutic properties: emollient.

Preparation and use: oil, decoction.

Notes and observations: its husks together with *Malva*, figs, orange rind, and *Ceratonia siliqua* were used to prepare a decoction to relieve cough.

Prunus persica (L.) Batsch

Use recorded in Monteroni.

Dialect name: *apritia, apritura*.

Part used: flowers.

Therapeutic properties: bronchial reliever.

Preparation and use: infusion.

Notes and observations: flowers in bud were used to treat asthma.

Pyrus cydonia L.

Use recorded in Monteroni and Marittima.

Dialect name: *Cutugnu*.

Part used: seeds.

Therapeutic properties: emollient.

Preparation and use: liniment.

Notes and observations: its seeds were soaked in water for some hours and the mucilaginous remedy which came out was applied on rhagades and scolds.

Reseda lutea L.

Use recorded in Monteroni and Novoli.

Dialect name: *amurino riestu*.

Part used: top flowers.

Therapeutic properties: diaphoretic, diuretic.

Preparation and use: infusion.

Notes and observations: the infusion made with top flowers was used to treat flue because of its sudorific action.

Rosmarinus officinalis L.

Use recorded in Surbo.

Dialect name: *rosmarinu*.

Part used: leaves.

Therapeutic properties: anti-inflammatory, bronchial reliever, expectorant, analgesic.

Preparation and use: decoction.

Notes and observations: a decoction of stems and leaves was used to make compresses for abscesses; ground leaves were used to make cigarettes for asthma; dried leaves on a hot iron gave out a smoke which was breathed to eliminate catarrh. A decoction made by boiling for two minutes some leaves in water and sweetened with honey was used to treat headache.

Ruta graveolens L.

Use recorded in Novoli, Monteroni, and Marittima.

Dialect name: *ruta*.

Part used: leaves.

Therapeutic properties: vermifuge, anti-inflammatory, antiseptic.

Preparation and use: fresh plant, ointment.

Notes and observations: the juice from leaves was used to treat intestinal parasites, cough and any kind of inflammation at the respiratory apparatus. An ointment to relieve rheumatic pains was made by soaking some leaves in olive oil. Its leaves were also used to prepare a digestive liqueur useful also for stomach-ache (in Monteroni). The dried plant was also used to disinfect rural houses and stables from mites, fleas and lice.

Solanum tuberosum L.

Use recorded throughout the investigated area.

Dialect name: *patana*, *pitata*.

Part used: tuber.

Therapeutic properties: anti-inflammatory, lenitive.

Preparation and use: fresh plant.

Notes and observations: thin slices of the tuber were applied both on the eyes to absorb blood shedding and on scolds to relieve pains and to prevent blisters.

Sonchus oleraceus L.

Use recorded in Monteroni and Novoli.

Dialect name: *zangune*.

Part used: leaves.

Therapeutic properties: anti anaemic, ant ulcer.

Preparation and use: fresh plant.

Notes and observations: the raw leaves were eaten for gastric acidity; a salad made with raw leaves of *Sonchus oleraceus*, *Cichorium intybus* (*cecore reste*) and *Taraxacum officinale* was employed to prevent anaemia.

Teucrium chamaedrys L.

Use recorded in Monteroni, Marittima, Lucugnano, and Corsano.

Dialect name: *camedriu*.

Part used: aerial parts.

Therapeutic properties: anti anaemic.

Preparation and use: infusion, decoction.

Notes and observations: the infusion was used to facilitate menstruation; the fresh plant was kept overnight under the armpits and the day after menstruation would appear. A glass of a drink made by boiling the aerial parts together with *Centaureum erythraea* and rhubarb was drunk before breakfast to treat the *maleculure* ("pallor in the face"), that is to say anaemia and jaundice.

Thymus capitatus (L.) Hoffmanns et Link

Use recorded throughout the investigated area.

Dialect name: *tumu*.

Part used: aerial parts.

Therapeutic properties: expectorant.

Preparation and use: suffumigation.

Notes and observations: the aerial parts were boiled and the steam which came out was breathed; when children got whooping-cough were taken to walk in the Mediterranean maquis to breath the essence since this habitat is rich of bushes of *Thymus capitatus*.

Trigonella corniculata (L.) L.

Use recorded in Zollino.

Dialect name: *sárcula*, *fárcula*.

Part used: flowers.

Therapeutic properties: expectorant, anti arthritis.

Preparation and use: cataplasm.

Notes and observations: warmed cotton bags of dried flowers were wrapped around the body to treat bronchitis, catarrh and arthritis; they were also a remedy to calm down liver and kidney pains.

Triticum aestivum L.

Used in Monteroni.

Dialect name: *crusca, canija*.

Part used: outer part of the wheat after grinding.

Therapeutic properties: laxative.

Preparation and use: decoction.

Notes and observations: the decoction of the outer part of wheat after grinding was used as a remedy against constipation.

Typha angustifolia L.

Use recorded in Surbo, Novoli, Martano, and Marittima.

Dialect name: *stiancia, pinna de tajiù, erva de tajiù*.

Part used: young leaves.

Therapeutic properties: homeostatic, styptic.

Preparation and use: crude fresh leaves.

Notes and observations: flowering tops of *Typha angustifolia* form a piloccia, a substance which was tied up around wounds to stop them bleeding.

Umbilicus horizontalis (Guss.) DC.

Use recorded in Marittima.

Dialect name: *sunetti*.

Part used: leaves.

Therapeutic properties: lenitive.

Preparation and use: cataplasm.

Notes and observations: the leaves were crushed to obtain a cataplasm to put on chilblains and scalds.

Urtica sp. pl.

Used recorded throughout the investigated area.

Dialect name: *irdicula, ardica*.

Part used: leaves, roots.

Therapeutic properties: haemostatic, antiseptic.

Preparation and use: juice, decoction.

Notes and observations: small cloth bands soaked with the juice obtained by crushing the leaves were put into the bleeding nostrils to stop haemorrhage. The roots were boiled in vinegar for five minutes in order to obtain a lotion to prevent hair fall. The decoction of roots was used to rinse hands and feet to treat whitlow and blisters of herpes (in Novoli) on the skin of any part of the body.

Vitis vinifera L.

Use recorded throughout the investigated area.

Dialect name: *pampana, ua*.

Part used: leaves.

Therapeutic properties: anti-inflammatory.

Preparation and use: crude fresh plant.

Notes and observations: vine leaves were employed to prepare compresses to treat conjunctivitis and any kind of inflammation around the eyes; l'acqua di pergola, the lymph coming out the plant while pruning, was employed to make decongestant rinses. This use may be based on the medieval Doctrine of the Signs. A glass of cold sweetened wine, called false wine, was drunk against cough before going to bed (this use is widespread throughout the territory).

Ziziphus sativa Gaertner

Used recorded in Salice and Leverano.

Dialect name: *scisciula, sciscela*.

Part used: drupes.

Therapeutic properties: respiratory ailments.

Preparation and use: decoction.

Notes and observations: an antitussive remedy was prepared by boiling all together drupes of *Ziziphus sativa*, dried figs and almond-husk.

DISCUSSION AND CONCLUSIONS

The majority of the species mentioned above were used in the treatment of a number of diseases and ailments related to intestinal disorders (46%), the skin (41%) and as anti-inflammatory for pain relief (28%); the circulation and respiratory organs (20%), the nervous system as well as the liver and urinary organs (11%) were also treated with traditional folk herbal remedies; the 6% of the species reported in this study were used as febrifuge. The field research also shows that the drugs were taken as decoction (40%), as infusion or as direct application of the fresh plant on the sore parts (29%), as cataplasm and oily ointment and liniment (15%). A special mention of the use of the carob-fruit flour given to children for diarrhoea is done.

The most frequent ailments which were treated with herbal remedies in the investigated territory are shown in Table 1.

The most frequently employed plants were garlic, laurel, mallow, olive tree, opium poppy, rue, rosemary and thyme.

The present research shows that the use of herbal remedies was very widespread throughout the

Salento territory. A data analysis shows that some species, such as mallow (*Malva sylvestris*), rue (*Ruta graveolens*) and olive tree (*Olea europea*), were employed in the treatment of different ailments, whereas other species, such as opium poppy (*Papaver somniferum*), are mentioned only for specific purposes.

Table 1 - Percentage rate of most common ailments treated with plants.

Circulation and respiratory apparatus	20%
Febrifuge	6%
Anti-inflammatory	28%
Skin affections	41%
Intestinal parasites	46%
Urinary troubles, nervous system and analgesic	11%

Folk traditional herbal remedies very often coincide with contemporary medicine; this sometimes can be explained by studying the active principles contained in the plant species. Nevertheless some popular uses reported by infor-

mants are quite unusual. These observations may provide hints for further chemical pharmacological studies on these plant species.

Furthermore, this field research shows that only elderly people know the use of herbal remedies and therefore some uses, very common in the past, are on the verge of being lost from the cultural heritage of the investigated area. Luckily there is nowadays some renewed interest towards tradition and local cultural roots. All this could help conserve the folk know-how and custom of this territory. The shortage of numerous written documents on the traditional medicine confirm that further scientific investigations must be undertaken throughout all the Salento territory.

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