Medicinal Plants in Central Chile¹

JOSÉ SAN MARTÍN A.²

A list of 131 species with medicinal uses in the province of Talca, VII Maule Region in Central Chile, is given. Sixty-six of these are native and the rest introduced.

LOCATION, CLIMATE, AND PEOPLE

The province of Talca (Chile) is located in the middle of the Central Zone, forming part of the VII Region, or Region del Maule (Fig. 1, 2). The geography of the region is broken with a Central Valley between 2 mountain ranges; on the east, by the Andean mountain chain and on the west, by the Coastal mountain range (Lauer, 1962; Quintanilla, 1979). In both mountain ranges, hills forming small valleys can be found. These valleys are thinly populated, and the main activities of the population are cattle raising and farming. The greatest number of inhabitants is found in the Central Valley where agriculture is more intensive.

A Mediterranean climate, with abundant rainfall, low temperatures in winter, as well as prolonged (Huber, 1975; Di Castri and Hájek, 1976), dry, hot summers, favours the development of intensive farming and cattle raising (Weischet, 1970). These activities, in turn, support the settlement of disperse groups in far-off places of the province, where communication with the urban and medical centers becomes difficult. The division of the land into lots has brought on the existence of many small landowners who produce a bare minimum for their family's survival. Due to the fact that many young children are forced to help out with the farming, a large percentage of the rural population lacks adequate primary education. This lack of education becomes a disadvantage when these people move to the industrial centers; on the other hand, those living in urban environments have the opportunity to finish their studies and thus to follow a profession (Crocco, 1965a).

The cultural level is, therefore, low even when these rural communities maintain and pass on folklore that is expressed in their arts, in their recreation, and in their diet and in their health. These people represent what may be called the typical Chilean race. They are the product of the mingling of the Spanish conquerors with the Indians of the region (Pereira, 1965). These people inherited a strong religious influence from their ancestors and they retain a great number of superstitions and beliefs. Even today, such a tradition forms part of the idiosyncrasy of the inhabitants of Chile's Central Zone. This is manifested in the practice of folk medicine, based on the use of plants and practised both on human and domestic animals. Anthropologists who have studied this phenomenon in detail state that the practice thrives among those with low incomes (Crocco, 1965b). This subculture is nurtured by pseudoscientific literature, where the nomenclature of plant species is applied incorrectly, where exotic plants which are nonexistent in Chile and which are confused with some native species are cited, and where vernacular names more properly applied to European species are given to native plants (Gunckel, 1951). The confusion created makes it very difficult to isolate the truly valuable scientific information (Hochstetter, 1977).

The aim of this paper is to present the information concerning medicinal plants of this region. With it we hope to contribute to the maintenance of rich traditions as well as to

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² Area de Ciencias y Tecnología, Pont. Universidad Católica de Chile, Casilla 617 Talca, Chile.

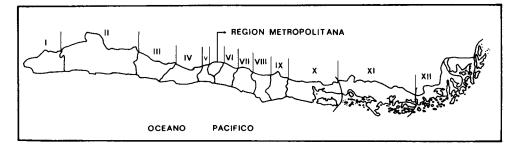


Fig. 1. Map of continental Chile with the regions indicated by Roman numerals. In the Area Metropolitana is located the capital, Santiago.

provide access to specialists in the search of natural products, with the aim of using them in modern medicine.

METHODOLOGY

The study area consists of rural, urban, and sub-urban sites; 10 in all (Fig. 2). Each of the sites was chosen after taking into consideration their distance from the nearest hospital or first-aid station as well as the incidence of an established ambulatory medicinal herb commerce. Several visits, each lasting from 1–3 days, were made to each site. Dwellers, preferably older persons whose empirical knowledge was respected by everyone, medicine men who were often difficult to locate as well as patients of the medicine men, and those who practice popular medicine domestically, were interviewed. A chart containing the type and the empirical use assigned to the different species to cure a certain pain, disease or organic deficiency was drawn up with the information obtained in the interviews (Font Quer, 1962). The plants' effectiveness was not investigated. Informants were asked to show or indicate the place where the plants grew wild. The plants were then collected, prepared, and deposited in the herbarium of the Botanic Institute at the Universidad Austral de Chile, Valdivia (VALD). The name of the collector and the collection number of the specimen were recorded.

CHARACTERIZATION OF THE SPECIES

In the Catalogue that follows the information given after the scientific name is ordered as follows: local name of each plant, collector, collection number, plant habit, origin, region occupied in Chilean territory (Roman numeral, Fig. 1), relative abundance according to an arbitrary scale, plant formation, and the medicinal uses of the plant reported by local people.

CATALOGUE OF MEDICINAL PLANTS FROM CENTRAL CHILE

PTERIDOPHYTA

Aspidiaceae

Ctenitis spectabilis (Kaulf.) Kunkel, helecho fino; Rudolph 514; perennial herb; native; IV-XI; scarce; woodland; fronds soaked in hot water with Fumaria agraria, taken as tonic; San Clemente.

Equisetaceae

Equisetum bogotense H.B.K., cola de caballo, hierba del platero, limpia plata, yerba de la plata; Schmitz 1151; perennial herb; native; IV-XI; frequent; woodland; whole plant soaked in hot water which is taken for bladder and kidney disorders, or as astringent. Mixed with other species of different families used in making different kinds of medicines; Talca, Constitución, Curepto, Carretones.

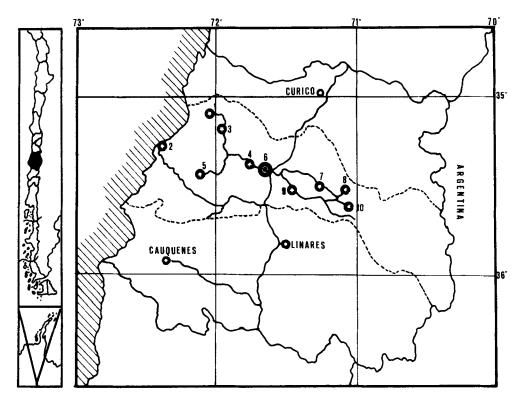


Fig. 2. Map of the VII Region (Region del Maule). Places visited in the province of Talca: 1 = Curepto; 2 = Constitución; 3 = Gualleco; 4 = Pencahue; 5 = Toconey; 6 = Talca; 7 = Carretones; 8 = Alto Vilches; 9 = San Clemente; 10 = Corel. Insert: outline of Chile, showing location of study area.

DICOTYLEDONEAE

Ampelidaceae

Vitis vinifera L., parra, parrón, vid, viña; San Martín 1026; climber; foreign; I-X; abundant; cultivated; stem mixed with Solanum nigrum and Cestrum parqui and applied to treat inflammation; Curepto.

Anacardiaceae

Lithraea caustica (Mol.) H. et Arn., litre; Oliva 66; tree; native; IV-VIII; abundant; woodland; leaf eaten raw to treat allergy; juice of stem with *Rubus ulmifolius* used for cough treatment; Gualleco, Carretones.

Schinus polygamus (Cav.) Cabrera, huigán; San Martín 1069; shrub; native; V-VIII; abundant; scrub; juice of stem used for child diuresis; also to treat itching; Gualleco, Constitución.

Berberidaceae

Berberis actinacantha Mart., michay; San Martín 982; shrub; native; VI-VIII; frequent; scrub; stem boiled and resulting solution with sugar given to reduce fevers; Curepto, Pencahue.

Berberis empetrifolia Lam., zarcilla; Rudolph 3046; shrub; native; VI-XII; scarce; scrub; crushed root with Citrus limon and Mulinum spinosum administered for mountain sickness; San Clemente.

Boraginaceae

Borago officinalis L., borraja; Rudolph 5341; annual herb; foreign; V-VIII; frequent; cultivated; whole plant boiled and the water administered to reduce fever and as emmenagogue; Curepto, Talca.

Buddlejaceae

Buddleja globosa Hope, matico, pañil; Rudolph 5253; shrub; native; V-X; frequent; scrub; aqueous extract of leaves ingested as stomachic tea; also to treat wounds and ulcers. Plant mixed with other species of different families and genera, used in making different kinds of medicine; Curepto, Talca, Carretones, Pencahue.

Cactaceae

Opuntia ficus-indica Mill., tuna; San Martín 1006; shrub; foreign; I-VIII; abundant; cultivated; crushed cladodes are boiled and resulting solution taken for bronchial troubles; Talca.

Caprifoliaceae

Sambucus australis Ch. et Schl., saúco; Rudolph 4871; tree; foreign; V-VIII; frequent; cultivated; stem pieces are boiled and resulting solution given to reduce fever; Curepto.

Sambucus nigra var. albovariegata West., saúco; San Martín 1018; shrub; foreign; V-X; frequent; cultivated; plant used as is S. australis in Talca.

Caryophyllaceae

Spergularia media (L.) Presl., hierba del pasmo; Rudolph 2452; annual herb; foreign; V-VIII; abundant; grassland; aqueous extract of whole plant applied to treat inflammation; Curepto.

Stellaria media S.M., quilloi-quilloi; Rudolph 2414; annual herb; foreign; V-VIII; frequent; grassland; dew from leaves applied as a film on eyes; Pencahue.

Celastraceae

Maytenus boaria Mol., maitén; Rudolph 3913; tree; native; I-XII; abundant; scrub; aqueous extract of stem, leaves and seeds used for internal pain; Carretones, Constitución.

Chenopodiaceae

Chenopodium ambrosioides L., paico; Rudolph 2270; perennial herb; native; V-VIII; abundant; grassland; aqueous extract of roots with *Peumus boldus* to treat child diarrhea; also bud mixed with *Artemisia vulgaris* taken as purgative; Curepto, Pencahue, Carretones and Talca.

Compositae

Anthemis nobilis L., manzanilla romana; San Martín 978; annual herb; foreign; IV-VII; scarce; cultivated; plant used in preparing sweat potion; Talca.

Artemisia abrotanum L., éter; Rudolph 6573; perennial herb; foreign; V-VIII; scarce; cultivated; juice of plant used in preparing potion for heart; Corel.

Artemisia absinthium L. ajenjo, hierba dulce; Rudolph 6579; perennial herb; foreign; V-VIII; scrub; cultivated; juice of stem and leaves given for hepatic troubles; Curepto.

Artemisia vulgaris L., altamiza, artemisa; Rudolph 6574; annual herb; foreign; V-VIII; scrub; cultivated; aqueous extract of stem and leaves taken as stomachic tea, potion for liver diseases; also used with Chenopodium ambrosioides; Talca, Pencahue, Carretones.

Baccharis linearis (R. et Pav.) Pers., romerillo; San Martín 981; shrub; native; III–VIII; abundant; scrub; the stem is boiled in water which is taken for arterial blood, and also for pyorrhea; Constitución, Alto Vilches.

Cirsium vulgare (Savi) Tenore, cardo negro; Rudolph 6822; perennial herb; foreign; V-X; abundant; grassland; juice of leaves with Margyricarpus pinnatus administered for bladder and kidney trouble; Gualleco.

Gnaphalium vira-vira Mol., hierba de la diuca, hierba de la vida, vira-vira; Rudolph 124; perennial herb; native; IV-IX; frequent; grassland; decoction of plant is used to treat bronchial troubles; San Clemente.

Gnaphalium sp., hierba de la diuca; Rudolph 6419; perennial herb; native; IV-VIII; frequent; grassland; aqueous extract of plant administered for urinal duct troubles; San Clemente.

Haplopappus baylahuen Remy, bailahuén; Klempau 336; perennial herb; native; III-IV; frequent; grassland; hot water of soaked leaves drunk to treat hepatic problems; Talca, Constitución.

Leuceria lithospermifolia (Less.) Reiche, quelén-quelén; San Martín 999; perennial herb; native; VII-VIII; frequent; grassland; aqueous extract of plant and mixed with species of different families and genera, taken as stomachic tea; San Clemente.

Matricaria chamomilla L., manzanilla; Romero 65; annual herb; foreign; V-VIII; frequent; grassland; whole plant soaked in hot water, afterwards given for stomachaches; also mixed with Capsella bursa-pastoris; Curepto, Constitución.

Nassauvia revoluta Don, corontillo; Philippi 40; perennial herb; native; VI-VIII; frequent; grassland, drink decoction of plant for stomachache; San Clemente.

Petasites cf. fragans Presl., tusílago; Rudolph 6406; perennial herb; foreign; V-X; frequent; cultivated; drink hot water from leaf for cough treatment; Curepto, Constitución.

Podanthus ovatifolius Lag., **mitique, mitrío, mitrique, palo negro**; *Delgado* 7; shrub; native; V-X; frequent; scrub; aqueous extract of stem administered as emmenagogue; also for bladder disorders; Curepto, Talca.

Senecio fistulosus Poepp. ex Less., hualtata, lampazo; San Martín 1029; perennial herb; native; V-X; frequent; swamps; leaf juice used to treat cardiovascular diseases; Talca, Constitución.

Senecio pycnanthus Phil., quelén-quelén; San Martín 1020; perennial herb; native; VII; scarce; grassland; plant used to prepare stomachic tea with species of other families and genera; San Clemente.

Xanthium spinosum L., cepacaballo, clonqui, concli; Rudolph 6817; annual herb; native; V-VIII; abundant; grassland; aqueous extract of root taken as stomachic tea; also for liver diseases; San Clemente.

Crassulaceae

Rocchela cf. coccinea (L.) DC., rochela, roquela; San Martín 1016; perennial herb; foreign; V-VIII; scarce; cultivated; fresh leaf applied externally to treat headaches; Talca.

Cruciferae

Brassica campestris L., yuyo; Oehrens 54; annual herb; foreign; V-X; abundant; grassland; leaf juice mixed with Stemodia chilensis used to treat vomiting; Pencahue.

Capsella bursa-pastoris (L.) Medik., bolsita, bolsita del pastor, cucharita, mastuerzo; Oehrens 55; annual herb; foreign; V-X; abundant; grassland; plant used with Matricaria chamomilla; Constitución, San Clemente.

Cuscutaceae

Cuscuta chilensis Ker.G., cabello de ángel, cúscuta; *San Martín* 987; annual herb; native; V-X; abundant; grassland; crushed plant used to treat tumours; Constitución.

Elaeocarpaceae

Aristotelia chilensis (Mol.) Stuntz., maqui; Rudolph 3974; shrub; native; IV-X; frequent; scrub; aqueous extract of dry fruit mixed with *Punica granatum* drunk for digestive troubles and child diarrhea; Constitución, Curepto, Pencahue, Talca.

Escalloniaceae

Escallonia illinita Presl., hierba del barraco, ñipa, yerba del barraco; *San Martín 990*; shrub; native; IV-X; frequent; scrub; aqueous extract of stem and leaf used to treat kidney pain, rheumatism, liver diseases; Carretones, Pencahue, Talca.

Euphorbiaceae

Colliguaya odorifera Mol., **coliguay**, **colliguay**; *Klempau 394*; shrub; native; V–VIII; frequent; scrub; stem latex applied for toothache; Curepto.

Fagaceae

Quercus robur L., encina, encino; San Martín 1013; tree; foreign; IV-X; frequent; cultivated; aqueous extract of stem used for urinary troubles; Constitución.

Fumariaceae

Fumaria agraria L., fumaria, yerba de la culebra; San Martín 993; annual herb; foreign; IV-VIII; frequent; grassland; plant used with Ctenitis spectabilis as tonic; San Clemente.

Gentianaceae

Centaurium canchanlahuen (Mol.) Robinson, cachanlahue, canchanlahue; San Martín 984; annual herb; native; III-X; frequent; grassland; drink hot decoction of plant for blood disorders and arterial blood pressure; also with *Polygonum sanguinaria* given for blood purification; Talca, Carretones, Constitución.

Geraniaceae

Erodium moschatum (L.) L'Her., alfilerillo; Rudolph 3709; annual herb; foreign; V-VIII; frequent; grassland; drink infusion of plant as stomachic tea; Carretones.

Pelargonium cf. graveolens L'Her., malva, malva rosa; San Martín 1007; perennial herb; foreign; V-VIII; frequent; cultivated; leaf juice taken as stomachic tea; Toconey.

Pelargonium sp., **cardenal**; *San Martín 1009*; perennial herb; foreign; I-X; cultivated; leaf juice taken to treat constipated children; and with *Persea americana* and *Eriobotrya japonica* for internal pain; infusion of flower drunk for cough treatment; Carretones, Pencahue.

Viviania marifolia Cav., té de burro; San Martín 1027; shrub; native; IV-VII; scarce; scrub; infusion of plant mixed with species of different families and different genera, used as stomachic tea, hepatic treatment and kidney troubles; San Clemente.

Wendtia gracilis Meyen, té de burro; San Martín 1028; shrub; native; IV-XII; scarce; scrub; plant employed the same as Viviania marifolia; San Clemente.

Gunneraceae

Gunnera chilensis Lam., pangue, pangui; Rudolph 4807; perennial herb; native; V-XII; frequent; woodland; infusion of plant administered for hepatic treatment, stomachache and to treat wounds; also mixed with Trevoa trinervis and Equisetum bogotense to treat haematomae; Curepto, Talca, Carretones.

Hydrophyllaceae

Phacelia circinnata Jacq., hierba de la cuncuna, malloa; *Rudolph 5365*; perennial herb; foreign; IV-VIII; abundant; grassland; drink infusion of root as stomachic; San Clemente.

Juglandaceae

Juglans regia L., nogal; San Martín 995; tree; foreign; V-VIII; frequent; cultivated; infusion of leaf taken for diabetes and stomachic tea; also for internal washing; San Clemente.

Labiatae

Lavandula officinalis Chaix, lavanda; Rudolph 5409; perennial herb; foreign; IV-X; frequent; cultivated; drink infusion of flower as stomachic tea and emmenagogue; Talca.

Marrubium vulgare L., toronjil cuyano; Rudolph 5379; perennial herb; foreign; IV-IX; frequent; cultivated; plant soaked in water which is used for liver diseases and to treat ulcers; also mixed with Buddleja globosa and Cestrum parqui to treat wounds; Curepto, Talca, Constitución, Carretones.

Melissa officinalis L., toronjil, toronjil oloroso; *Rudolph 5430*; perennial herb; foreign; V–VIII; abundant; cultivated; leaf and stem juice given for heart pain; Carretones, Gualleco, Talca.

Mentha citrata E.H.R.H., hierba moto, moto; *Rudolph 5397*; perennial herb; foreign; IV-VIII; frequent; swamps; infusion of plant given for liver diseases and stomach disorders; Carretones, Curepto.

Mentha piperita L., hierba buena, menta; San Martín 1003; perennial herb; foreign; IV-X; abundant; swamps; drink infusion of plant for stomach disorders; Curepto, Constitución, Gualleco.

Mentha pulegium L., poleo, té del país; Rudolph 5405; perennial herb; foreign; IV-X; abundant; swamps; plant employed the same as M. piperita; Carretones, Constitución.

Rosmarinus officinalis L., romero de castilla, romero castilla; Rudolph 5429; shrub; foreign; V-X; frequent; cultivated; plant soaked in alcohol and solution used for backache, earache, cold feet,

bone pain and rheumatism; also mixed with Cestrum parqui and Allium sativum; Constitución, Pencahue, Curepto.

Ocimum basilicum L., albaca, albahaca; San Martín 1004; annual herb; foreign; IV-X; frequent; cultivated; drink infusion of plant as emmenagogue; Talca.

Salvia officinalis L., salvia; Rudolph 5308; shrub; foreign; V-VIII; frequent; cultivated; infusion of leaves for kidney troubles and child diuresis; also as stomachic tea and cough treatment; Curepto, Talca.

Laureaceae

Cryptocarya alba (Mol.) Looser, **peumo**; *Romero 72*; tree; native; IV-X; abundant; scrub; aqueous extract of stem and leaves for internal washing; Talca.

Persea americana Miller, palto; Delgado 74; tree; foreign; IV-X; frequent; cultivated; drink infusion as stomachic mixed with *Eriobotrya japonica* and *Pelargonium* sp. for internal pain; Constitución, Carretones.

Linaceae

Linum macraei Benth., ñanco; San Martín 1001; perennial herb; native; IV-VIII; frequent; grassland; aqueous extract of plant drunk for stomachache and to treat anaemia; Talca, San Clemente.

Loranthaceae

Phrygilanthus tetrandus (R. et Pav.) Eichl., quintral, quintral de maqui; *Rudolph 2107*; shrub; native; IV-X; abundant; scrub; drink infusion of leaf as stomachic tea; Carretones.

Malvaceae

Althaea officinalis L., malva; San Martín 979; perennial herb; foreign; V-VIII; frequent; cultivated; drink decoction of root for cough treatment; Talca.

Modiola caroliniana (L.) Don, pila-pila; Rudolph 4026; perennial herb; foreign; IV-X; abundant; grassland; leaf juice used for cardiovascular diseases; Curepto.

Mimosaceae

Acacia caven (Mol.) Hook. et Arn., espino; Trunjillo 66; tree; native; V-VIII; abundant; scrub; aqueous extract of seed used as coffee substitute and, mixed with Zea mays, for child diuresis; also with Triticum aestivum and Peumus boldus taken for bladder diseases; Pencahue, Talca, Curepto.

Monimiaceae

Peumus boldus Mol., **boldo**; *Rudolph 2738*; tree; native; V-X; abundant; scrub; aqueous extract of leaf taken as hepatic; also mixed with *Equisetum bogotense*; Constitución, Gualleco, Curepto.

Moraceae

Ficus carica L., higuera; San Martín 992; tree; foreign; IV-VIII; frequent; cultivated; stem latex used for toothache; Curepto.

Myrtaceae

Eucalyptus globulus Labill., alcalipto, eucalipto; San Martín 991; tree; foreign; IV-X; abundant; cultivated; aqueous extract of leaf and fruit taken for cough treatment and bronchial troubles; Constitución.

Ugni molinae Turcz., murtilla; Rudolph 4408; shrub; native; VII-XI; frequent; woodland; aqueous solution of raw fruit used as refreshing drink; Curepto.

Onagraceae

Fuchsia magellanica Lam., chilco, fucsia; *Rudolph 4725*; shrub; native; IV-XII; frequent; woodland; aqueous extract of stem used for blood purification; also with *Oxalis rosea* and *Borago officinalis* given as emmenagogue, abortive and purgative; Curepto, Talca.

Oenothera acaulis Cav., hierba del sapo; Rudolph 4742; perennial herb; native; IV-X; frequent;

grassland; infusion of stem and leaves used as kidney potion and for internal hemorrhage; also mixed with *O. affinis* and *Equisetum bogotense* to treat wounds; Curepto, Talca.

Oenothera cf. affinis Cambess., don diego de la noche; San Martín 1005; perennial herb; native; I-VIII; frequent; grassland; infusion of plant with O. acaulis and Equisetum bogotense given for internal hemorrhage; Constitución.

Oxalidaceae

Oxalis rosea Jacq., culle, culli, culle colorado; Rudolph 3674; perennial herb; native; IV-X; frequent; grassland; crushed plant applied to treat scurf, fever, cough and colds; Curepto, Talca, Carretones, Constitución.

Papilionaceae

Adesmia emarginata Clos., paramela; San Martín 975; perennial herb; native; VII-X; scarce; grassland; drink infusion of vegetative plants for stomach disorders; also mixed with species of different families and different genera, as digestive tea; San Clemente.

Psorolea glandulosa L., culén; *Rudolph 3487*; shrub; native; IV-X; abundant; scrub; vegetative plants used as orgeat and Argentinian tea; Talca, Curepto.

Sophora macrocarpa S.M., mayo, mayu; Rudolph 3574; shrub; native; V-VIII; frequent; woodland; drink decoction of stem for diarrhea; Alto Vilches.

Plantaginaceae

Plantago lanceolata L., lengua de vaca, siete venas; *Rudolph 5934*; perennial herb; foreign; IV-XII; abundant; grassland; leaf juice mixed with *P. major* used to treat wounds and hemorrhage; Constitución.

Plantago major L., llantén; Rudolph 5922; perennial herb; foreign; IV-X; frequent; swamps; drink infusion of leaves for diabetes; Constitución, Talca.

Polygonaceae

Polygonum aviculare L., hierba del pollo, pasto del pollo, sanguinaria del compo; *Rudolph 2174*; annual herb; foreign; IV-IX; abundant; grassland; drink decoction of plant with *P. sanguinaria* for blood purification; Curepto, Talca.

Polygonum sanguinaria L., sanguinaria, sanguinaria de playa; Oliva 68; annual herb; foreign; IV-VIII; scarce; dunes; infusion of plant with *P. aviculare* and *Centaurium canchanlahuen* given for blood purification; Curepto, Talca, Carretones.

Proteaceae

Lomatia hirsuta (Lam.) Diels, radal; Rudolph 2002; shrub; native; IV-X; abundant; scrub; aqueous extract of stem given for cough treatment, bronchial troubles and asthma; Constitución, Curepto, Talca.

Punicaceae

Punica granatum L., granado; San Martín 1012; tree; foreign; IV-VIII; frequent; cultivated; aqueous extract of fruit rind mixed with Oryza sativa and Aristotelia chilensis, given for child diarrhea; Carretones, Talca.

Rhamnaceae

Trevoa trinervis Miers., **trevo**; *San Martín 1024*; shrub; native; V–VII; frequent; scrub; aqueous extract of stem applied for haematomae; also mixed with *Equisetum bogotense* and *Gunnera chilensis*; Curepto, Pencahue, Talca, Carretones.

ECONOMIC BOTANY

Rosaceae

Acaena argentea R. et Pav., abrojo, amor seco, trun; Rudolph 3339; perennial herb; native; V-IX; frequent; grassland; infusion of leaves used for hepatic troubles; also mixed with Equisetum bogotense given for stomachic tea; Carretones, Constitución, Curepto.

Acaena splendens Hook. et Arn., cepacaballo; Gunckel 70; shrub; native; IV-VII; abundant; grassland; infusion of leaves used for kidney troubles; San Clemente.

Crataegus oxyacantha L., peumo extranjero; Oehrens 71; tree; foreign; V-VIII; frequent; scrub; infusion of flowers used for arterial blood pressure; Talca.

Cydonia oblonga Mill., membrillero, membrillo; San Martín 988; shrub; foreign; V-VIII; frequent; cultivated; aqueous extract of fruits used as refreshment; Gualleco.

Eriobotrya japonica (Thunb.) Lindl., níspero; San Martín 989; tree; foreign; IV-VIII; abundant; cultivated; leaf mixed with *Pelargonium* sp. and *Persea americana* and drunk for stomachaches; Carretones, Curepto.

Geum chilense Balb., hierba del clavo; Rudolph 3377; perennial herb; native; V-XII; scarce; grassland; drink decoction of root for kidney troubles, bladder and emmenagogue; also plant esteemed as aphrodisiac; San Clemente.

Kageneckia oblonga R. et Pav., bollén; San Martín 996; tree; native; IV-VIII; frequent; woodland; infusion of stem and leaf used as potion for hepatic and kidney problems; Carretones, Curepto.

Margyricarpus pinnatus (Lam.) O.K., perlilla, sabinilla; Rudolph 3350; shrub; native; IV-X; frequent; scrub; infusion of vegetative plant given for kidney troubles; also mixed with Cirsium lanceolatum; Constitución, Gualleco.

Prunus persica (L.) Batsch., durazno, duraznero; San Martín 1011; tree; foreign; I-X; abundant; cultivated; drink infusion of leaf as stomachic tea; Curepto.

Quillaja saponaria Mol., quillay; Duarte 79; tree; native; IV-VIII; abundant; woodland; leaf juice used for dandruff and hair loss; Constitución, Gualleco.

Rosa sp., rosa, rosa de remedio; *San Martín 1017*; shrub; foreign; V-VIII; frequent; scrub; infusion of vegetative plant used for cough treatment; also with *Melissa officinalis* and egg administered for child cardiovascular diseases; Carretones.

Rubus ulmifolius Schott. f., mora zarzamora; *Santos 75*; shrub; foreign; IV-X; abundant; scrub; infusion of stem given for diabetes; also root with *Lithraea caustica* used for cough treatment and cold; Carretones, Talca.

Rutaceae

Citrus limon (L.) Burm. f., limón, limonero; San Martín 985; tree; foreign; I-VIII; frequent; cultivated; infusion of leaf used as stomachic tea; also fruit juice given as refreshment; Constitución, Curepto, Gualleco, Talca.

Citrus sinensis (L.) Osbeck, naranjo, naranjo dulce; San Martín 986; tree; foreign; I-VIII; frequent; cultivated; plant used the same as C. limon; Constitución, Curepto, Gualleco, Talca.

Ruta bracteosa DC., ruda; Rudolph 3715; perennial herb; foreign; I-VIII frequent; cultivated; infusion of leaves and stem used for stomach disorders; Carretones, Talca.

Salicaceae

Salix chilensis Mol., saúce amargo, saúce chileno; San Martín 1018; tree; native; III-VIII; frequent; scrub; charcoal used to bleach teeth; drink hot decoction of stem to reduce fever and for blood disorders; also mixed with milk for paralysis; Constitución, Gualleco, Talca.

Santalaceae

Myoschilos oblonga R. et Pav., codocoipo, orocoi; *Rudolph 3816*; shrub; native; V-X; frequent; scrub; vegetative plant with species from other families and different genera mixed to prepare digestive tea; San Clemente.

Quinchamalium majus Brong., quinchamalí; San Martín 1014; annual herb; native; II-XII; frequent; scrub; infusion of the whole plant is used for hepatic diseases and as diuretic; San Clemente.

Saxifragaceae

Ribes punctatum R. et Pav., parrilla, quebracho, zarzaparrilla; San Martín 1015; shrub; native; V-X; frequent; scrub; aqueous extract of stem and leaf used for blood disorders and kidney troubles; Curepto, Talca.

Scrophulariaceae

Calceolaria thyrsiflora Grah., hierba dulce, palo dulce; San Martín 983; shrub; native; IV-VII; frequent; scrub; plant juice used for child diuresis, bladder disorders, and sugar substitute; Constitución, Corel, Talca.

Ourisia microphylla Poepp. et Endl., **pichipiedra**; *San Martín 1007*; perennial herb; native; VI-VIII; scarce; scrub; infusion of whole plant used for liver diseases, kidney troubles; also taken as stomachic tea; San Clemente.

Stemodia chilensis Benth. in DC., contrayerba; San Martín 1022; annual herb; native; V-VIII; scarce; grassland; infusion of whole plant used as stomachic tea; Pencahue.

Solanaceae

Cestrum parqui L'Her., palqui; Delgado 75; shrub; native; IV-VIII; abundant; scrub; infusion of stem and leaf used for inflammation, heart pain, wound washing, cough treatment, hemorrhage, eye wash, bladder pain, and stomachache; Carretones, Constitución, Pencahue, Talca.

Fabiana imbricata R. et Pav., pichi, romero pichi; Rudolph 5482; shrub; native; IV-XII; abundant; scrub; infusion of vegetative plant administered for urinary duct troubles, kidney troubles; Constitución, Curepto.

Nicotiana tabacum L., tabaco; Klempau 73; annual herb; foreign; IV-VIII; abundant; cultivated; dry leaf crushed and applied for inflammation; Gualleco.

Solanum gayanum Remy, natre, natri; Rudolph 5569; shrub; native; VII-VIII; frequent; scrub; drink decoction of stem as sweat potion; Alto Vilches, Constitución, Talca.

Solanum nigrum L., **llague**; Rudolph 5628; annual herb; foreign; V-X; abundant; scrub and grassland; leaf juice applied for burns and as stomachic tea; also mixed with Vitis vinifera and Cestrum parqui, used to treat inflammation and cardiovascular diseases; Constitución, Curepto, Talca.

Solanum tuberosum L., papa; Rudolph 5597; annual herb; native; I-XII; abundant; cultivated; the raw tubers applied externally for headache; Talca.

Tiliaceae

Tilia cf. *europaea* L., **tilo**; *San Martín 1023*; tree; foreign; I-X; abundant; cultivated; drink decoction of inflorescences as sweat potion; Talca.

Tilia platyphyllos Scop., tilo, tilo plateado; *Schmitz 138*; tree; foreign; I-X; frequent; cultivated; plant used the same as *T. europaea*; Talca.

Umbelliferae

Apium panul (DC) Reiche, panul; San Martín 980; perennial herb; native; IV-X; scarce; scrub; infusion of root used for kidney pain and heart pain; San Clemente, Curepto.

Coriandrum sativum L., cilantro; Rudolph 4913; annual herb; foreign; I-XII; abundant; cultivated; infusion of plant used as digestive tea; Talca.

Foeniculum vulgare Mill., hinojo; Rudolph 4916; perennial herb; foreign; V-VIII; abundant; grassland; infusion of leaf used as stomachic tea; Talca.

Laretia acaulis Hook., llareta; San Martín 998; shrub; native; I-VII; frequent; scrub; aqueous extract of plant used for hepatic troubles; Talca.

Mulinum spinosum (Cav.) Pers., hierba negra; Villaseñor 78; native; I-XII; frequent; scrub; plant with Berberis empetrifolia and Citrus limon used for mountain sickness; San Clemente.

Petroselinum crispum (Mill.) Mansf., perejil; San Martín 1010; annual herb; foreign; I-XII; abundant; cultivated; infusion of plant drunk as emmenagogue; Talca.

Verbenaceae

Lampaya medicinalis Phil., lampaya, lampayo; San Martín 997; shrub; native; I; frequent; scrub; infusion of vegetative plant used for hepatic troubles; Talca.

Lippia citriodora H.B.K., cedrón; San Martín 1002; shrub; foreign; V-VIII; scarce; cultivated; drink infusion of leaves as stomachic tea; Talca.

Winteraceae

Drimys winteri Forst., canelo; Rudolph 2801; tree; native; IV-XII; abundant; woodland; plant used to treat warts; Gualleco.

MONOCOTYLEDONEAE

Gramineae

Oryza sativa L., arroz; Santos 73; annual herb; foreign; V-VIII; abundant; cultivated; fruit with Punica granatum given for child diarrhea; Carretones.

Triticum aestivum L., **trigo**; *San Martín 1025*; annual herb; foreign; I-X; abundant; cultivated; drink decoction of fruit for stomachic disorders; also flour mixed with vinegar applied to reduce fever; Talca, Gualleco.

Zea mays L., maiz; Rudolph 1236; annual herb; foreign; I-X; abundant; cultivated; stigmas with Acacia caven (seed) and honey given for child diuresis; Pencahue.

Iridaceae

Libertia sessiliflora (Poepp.) Skottsb., huilmo, trique, trique-trique; San Martín 900; perennial herb; native; VII–VIII; scarce; scrub; infusion of root and stem used as emmenagogue and abortive; San Clemente, Talca, Constitución.

Liliaceae

Allium cepa L., cebolla; San Martín 976; perennial herb; foreign; I-XII; abundant; cultivated; bulb juice used as tonic; Pencahue.

Allium sativum L., ajo; San Martín 977; perennial herb; foreign; I-XII; abundant; cultivated; crushed bulb used like Rosmarinus officinalis and Cestrum parqui; Curepto, Gualleco, Pencahue.

Herreria stellata R. et Pav., salsa, zarcilla; San Martín 984; climber; native; VII-VIII; scarce; woodland; aqueous extract of root used for rheumatism; Constitución, Talca.

DISCUSSION

One hundred and thirty-one species used in popular medicine are listed from 10 sites in Central Chile. They include pteridophytes (2 families, 2 species) and angiosperms (52 families and 122 species of Dicotyledoneae; 3 families and 7 species of Monocotyledoneae). With respect to origin, the number of native plants is equal to the number of exotic plants. Preference in usage is evenly shared by both types of plants. However, cultivated plants are not as commonly used as wild plants. This shows, perhaps, the impact on the inhabitants of the local flora as a natural resource. The families with greater significance because of the number of species are: Compositae (17), Rosaceae (12), and Labiatae (9).

The places where medicinal plants are more intensively used are Talca, Curepto, Constitución, Corel and San Clemente; all, with the exception of Corel, are urban centers with competent health centers. Each has an established ambulatory commerce of medicinal plants and medicine men who are consulted both by the rural and urban population. In the rest of the places visited, popular medicine is more of the domestic type and is maintained mainly through folkloric tradition.

Species that are of no use to the dwellers of the place visited were not included. Some species, such as *Senecio pycnanthus*, *Quinchamalium majus*, *Calceolaria thyrsiflora* and *Myoschilos oblonga*, are often subject to massive collection by the inhabitants and are thus in danger of extinction.

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