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FILE: ■ Argentinean Ethnobotany
■ Argentina
■ Cardiovascular Conditions

HC 040486-364

Date: November 14, 2008

RE: Medicinal Plants Used for Blood, Cardiovascular, and Nervous Conditions in Argentina

Martínez GJ. Medicinal plants used by the criollos of Calamuchita to treat blood, cardiovascular, and neuroendocrinous diseases. *J Herbs, Spices & Medicinal Plants*. 2007;13(3):55-82.

In the Calamuchita region, Córdoba, Argentina, interviews and semi-structured questionnaires were used to identify folk medicine practices and plant species used for blood, cardiovascular, and neuroendocrinous conditions. Previous studies of medicinal plants have focused on other regions and on floristic characteristics of plants used. In this study, 74 species from 35 families were named, with 113 medicinal uses related to these health areas. Overall, 189 species with 754 different medicinal uses were reported. According to the authors, 18% of all drugs in the US pharmacopoeia are used to treat cardiovascular and nervous system ailments and tumors, with 52% of these being derived from ethnobotany. Drug research investment focuses on cardiovascular (26%) and nervous system (14%) diseases.

The study area population was very heterogenous. Informants were 59 Spanish-speaking *criollos*, a subculture mainly living on estates devoted to agriculture and livestock. With access to Western medicine, they still often use traditional healers or home remedies. Most medicines are decoctions or infusions of leaves or other aerial parts. Yerba maté (*Ilex paraguariensis*) is often used as an infusion base. Data were collected between 2000-2003. Informants ranged in age from 26-88, with a preponderance of women 66-75. Extensive interviews were held in order to better characterize traditional practices. Questions were asked about disease causes, diagnostic procedures, and therapies for different ailments. Plants were collected and vernacular names recorded. After identification, voucher specimens were deposited in the Herbarium of the Facultad de Ciencias Agropecuarias, Universidad Nacional de Córdoba. The article discusses interpretation of health and disease in folk societies. Among these informants, Hippocratic ideas of bodily humors and hot and cold properties

joined biomedical knowledge, Christian/ Catholic beliefs, and an association of neurological or psychical symptoms with supernatural causes.

Medicinal uses of plants were grouped into categories based on illnesses. Native plants, introduced non-cultivated local flora, and introduced cultivated plants were used for cardiovascular, nervous system, and neuroendocrinous problems. Among the latter, mint (*Mentha* spp.), feverfew (*Tanacetum parthenium*), tansy (*Tanacetum vulgare*; *Chrysanthemum vulgare*), lemon balm (*Melissa officinalis*), English walnut (*Juglans regia*), wormwood (*Artemisia absinthium*), and fig (*Ficus carica*) are often found in home gardens. Plants are often gathered in the field. Neuroendocrinous diseases were most frequently named, mostly diabetes and anxiety. Cardiovascular ailments, named second-most often, had the most plant uses and species, with the most frequent use being for palpitations and heart problems. Often, treatment for these conditions coincides with treatment for irritability and anxiety (9% of uses), using plants such as *Hypericum connatum*, lemon balm, blue passion flower (*Passiflora caerulea*), lemon verbena (*Aloysia citrodora*), and tila (*Tilia moltkei*). For hypertension, Argentine mistletoe (*Ligaria cuneifolia*), garlic (*Allium sativum*), olive (*Olea europaea*), and stinging nettle (*Urtica dioica*) were most used of 10 plants named; the latter three have known hypotensive effects.

Blood changes are significant health indicators among criollos. "Fat", "thick", "dirty" blood is thought to be a consequence of eating rich food or other excess. Balance is regained with depurative or blood-thinning plants, also used for skin eruptions, associated with impure blood. Blood changes may be called changes in cholesterol or uric acid, and depurative plants thought of as hypocholesterolemic and hypouricemic. Using plants to balance blood had the highest proportion of medicinal uses reported (20 = 18%). Species most frequently used for blood are jungia (*Jungia polita*), sticky waxweed (*Cuphea glutinosa*), and chaparral (*Larrea tridentata*). For diabetes, 10 plant uses (9% of total) were named; most frequently, cow's foot (*Bauhinia forficata*) and fig.

This study did not systematically evaluate previous research on every species named – and indeed found no research, or none on relevant conditions, for many plants in the *criollo* pharmacopoeia – but where it exists, it tends to support the folk use.

A high percentage of uses for each plant was reported by fewer than six informants (<10%), and very few uses were known to 30% of informants. This may indicate that such knowledge is not widely shared, or that it is decreasing with cultural erosion.

— Mariann Garner-Wizard

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