

Ritual and medicinal plants of the Ese'ejas of the Amazonian rainforest (Madre de Dios, Perú)

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Abstract

The Ese'aja is a hunter–fisher–gatherer tribe of Amerindians which occupies the south-eastern part of Perú. Their culture cannot be disassociated from religious beliefs. Disease can be caused by accident, distraction or indolence, or by evil powers. These evil powers come either from the direct action of a harmful shaman or by interactions with the Devil. A description of shamanic practices is given to elucidate the position of health practices in Ese'aja culture, which includes the use of medicinal and ritual plants. Aspects of ayahuasca (*Banisteriopsis caapi* (Spruce) Morton, Malpighiaceae) ritual in shaman initiation and in healing rituals are presented. Diagnosis and treatment include invocation to the ayahuasca spirit. Plants used as medicine or invoked for healing are presented.

Keywords: Ese'aja; Shamanism; Magic plants; Medicinal plants

1. Introduction

The Ese'aja, a hunter–fisher–gatherer tribe of Amerindians belonging to the Takana linguistic family, occupied the area delimited by 10° and 12° S, and 66° and 70° W, in the south-west Amazon Basin, along the Tambopata, Madre de Dios and Heath Rivers in Perú, and the Beni and Madidi Rivers in Bolivia. The Ese'aja culture, including economic practices, hunting and gathering, has always been associated with the river, namely, for their main transport and communication, and with

the forest, for their other needs. Plants have been very important in the Ese'aja's diet, as well as in their rituals to prevent diseases.

Medicinal knowledge of plants is strongly related to the use of 'ayahuasca', a drink made of a vine that grows in the forest, known as *Banisteriopsis caapi* (Spruce) Morton (Malpighiaceae), in ritual ceremonies. Because of the presence of the alkaloids harmine, harmaline and tetrahydroharmaline in its stem bark (Pages Larraya, 1979), the 'shaman', 'eyami tekua' (protector of the people) or healer, after ingestion of the plant, will fall into a trance, during which he claims to learn the art of healing the sick by using the plants of the forest.

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The use of 'ayahuasca' has been reported for several regions of the western Amazon Basin (e.g. Schultes, 1957, 1963, 1967; Prance, 1970; Pages Larraya 1979; Luna, 1984a, 1984b; García Barriga, 1992). The Ese'ija also call it 'jono pase' and the 'rope of the dead' (in Quéchuá language; 'aya', dead; 'huasca', rope).

At present, the Ese'ija of Perú comprise some 600 individuals settled in Infierno and Filadelfia, on the Tambopata River, and in Palma Real and Soene on the lower Madre de Dios and Heath Rivers. As recently as 1948, the Ese'ija population in Madre de Dios was estimated at 15 000 people (Chavarría Mendoza, 1984). Since this number has been drastically reduced in recent years, and due to acculturation pressures, their traditional knowledge on the use of natural resources is being rapidly lost. In the literature at hand, no information was found on plants used for medicinal purposes by the Ese'ija. Thus, the objective of the present work was to document the use of medicinal and magical plants among the Ese'ija, and to record their shamanic practices, in order to better understand the state of health practices of this culture, particularly as regards the use of medicinal and hallucinogenic plants.

The area of study is located in the subtropical Amazon biogeographical province of Perú (Anonymous, 1994), which comprises two main landscapes: the rainforests to the south and west, and the palm savannas (Pampas de Heath) to the north-east.

2. Methodology

Verbal information was obtained through interviews with adults recognized as having a high level of knowledge of the culture. Interviewees had spent most of their life in the forest, experiencing their culture in its pristine stage, and had little or no contact with Western civilization.

Field work was carried out in the settlements of Infierno and Filadelfia, and in La Ccollpa, during the month of January 1994 (Fig. 1). The data were cross-checked during leisurely conversations with adults and young people, and some of them were confirmed in Puerto Maldonado.

Most of the field work was carried out with the

help of the following informants: Agustín Mishaja (40–50 years old), belonging to the settlement of Infierno, and Alfredo Caligua (40–50 years old), belonging to the settlement of Filadelfia. All the medicinal plants were mentioned by these informants.

Mythic narrations and invocations were recorded in Spanish. Plant specimens were collected by the first author and identified by the second author. Voucher specimens (cited in Table 1) have been deposited in this institution.

3. Results

All plants obtained through the interviews and collected are listed in Table 1 by their scientific names and in alphabetical order. Data of these plants include: scientific name of the plant and its voucher specimen, Ese'ija name and details of use.

3.1. The ayahuasca ritual

When an Ese'ija suffers a disease, this person is treated and cared for by the shaman. This act takes place in an ayahuasca ritual, in which the healer boils the bark of the stem and drinks the macerate together with the person to be healed. Both the patients and the shaman will fall into a trance, during which they learn the causes of and the remedies for the disease. Since this ritual is a strong tabu, it was not possible to witness it. However, the authors were able to obtain a full description of the ritual from a shaman, as follows:

'The *soga* (rope) must be respected. Eleven fragments of the highest part of the plant are cut. These are boiled in water for eight hours, far away from the prying eyes of strangers, and only in the presence of a small group, usually two or three, of highly trusted persons. The healer sings and smokes wild tobacco (*Nicotiana tabacum* L., Solanaceae) before the ceremony. Once the drink is ready, the group drinks it. Soon after, the decoction elicits vomiting. After this, visions of all kinds of animals of the forest are claimed to appear to them, such as the "otorongo" (*Panthera onca*), the "cotomono" (*Alouatta seniculus*) and the "guacamayo" (*Ara* spp). Finally, the spirit of a

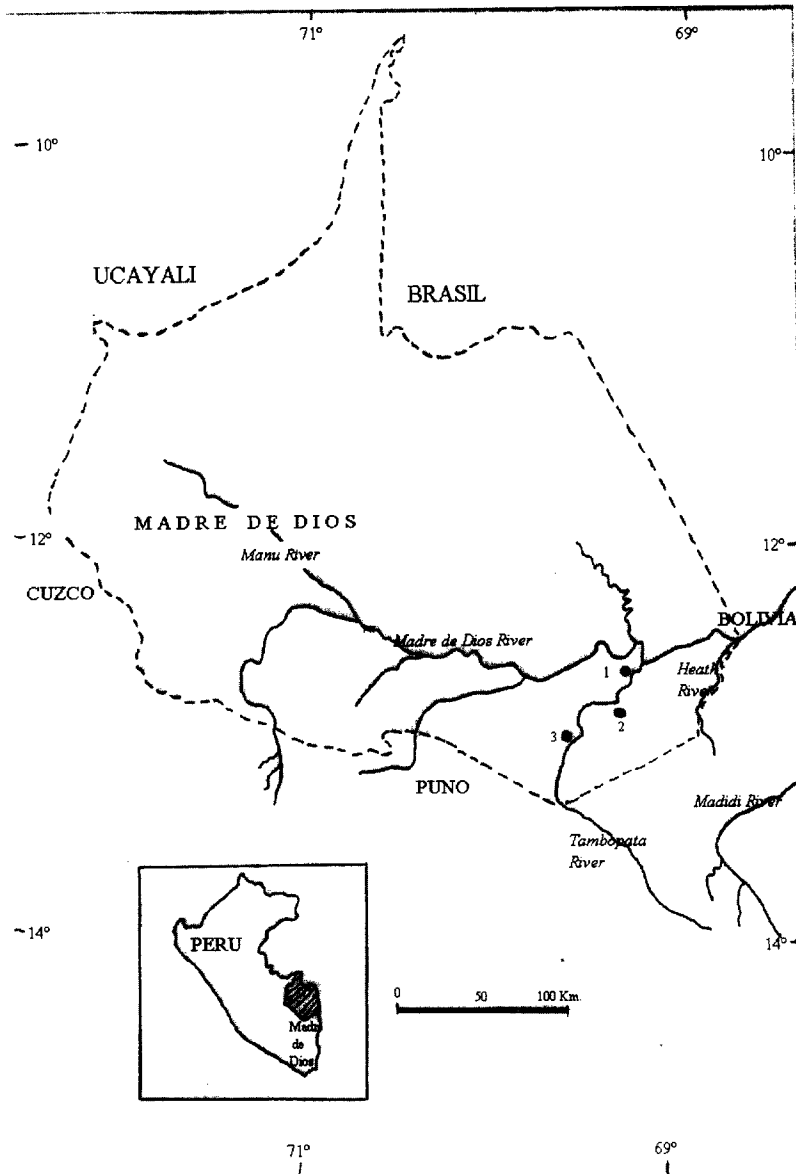


Fig. 1. Map of Madre de Dios showing the localities visited. 1, Infierno; 2, Filadelfia; 3, La Ccollpa.

woman shows up; she has a dark skin and dark eyes and long hair, which may be curled or straight. She is the *Madre de la Soga* (Mother of the Rope). She wants to know the purpose of the ritual. The healer asks her for advice to heal the sick person. The Mother of the Rope then directs and tells them the causes of the disease and the plants that will cure it. All the patients also see her.

They will ask questions about unknown things, be able to see things at a distance and distinguish good from evil. If the ritual is not taken seriously, however, she will punish them. Men dressed in steel armours will come along; they are feared by everyone, because the “chonta” (arrows made of *Gynerium sagittatum* Beauv., Poaceae) could not harm them.’

Table 1
Medicinal and ritual plants

Scientific name, family and voucher specimen number	Ese'ija name	Disease treated and use
<i>Abuta grandifolia</i> (Mart.) Sandwith (Menispermaceae) (533)	Abuta	The stem is ground and boiled. The infusion is taken orally to treat tuberculosis.
<i>Aspidosperma excelsa</i> Benth. (Apocynaceae) (534)	Remo caspi	To treat toothaches, the stem bark is chewed.
<i>Banisteriopsis caapi</i> (Spruce) Morton (Malpighiaceae) (535)	Ayahuasca, jono pase	The stem bark is boiled and the macerate is taken orally in healing rituals (see text).
<i>Batocarpus amazonicus</i> (Ducke) Fosberg (Moraceae) (536)	Mashonaste	The stem sap is rubbed on external ulcers.
<i>Brumfelsia grandiflora</i> D. Don (Solanaceae) (537)	Chiricsanango	To treat colds, the root is boiled in water and the infusion is taken orally.
<i>Chenopodium ambrosioides</i> L. (Chenopodiaceae) (538)	Paicco	To treat external mycosis, the leaves are rubbed on the body.
<i>Clavariadelphus</i> sp. (Clavariaceae) (539)	Hongo	Internal water of this mushroom is placed in the ear to treat earaches.
<i>Copaifera reticulata</i> Ducke (Caesalpiniaceae) (540)	Copaiba	To treat ulcers and other digestive diseases, the oil is obtained from the stem, and taken orally.
<i>Croton erythrochilus</i> Muell-Arg. (Euphorbiaceae) (541)	Sangre Grado	The stem latex is mixed with water and taken orally to treat internal injuries.
<i>Dracontium</i> sp. (Araceae) (542)	Sacha jergón	To treat snake wounds, the whole plant is boiled and the macerate is used externally.
<i>Erythrina ulei</i> Harms (Fabaceae) (543)	Amazizo	The stem bark is ground and rubbed on sting ray wounds.
<i>Euterpe precatoria</i> Martius (Palmae) (544)	Palma huasai	To treat anemia, the roots are ground, mixed with water and taken orally.
<i>Ficus insipida</i> Willd. (Moraceae) (545)	Ojé	Stem latex is taken orally as a purgative.
<i>Gynerium sagittatum</i> Beauv. (Poaceae) (546)	Caña agria, chonta	The ground leaves put into water are used in a bath to treat skin diseases.
<i>Hura crepitans</i> L. (Euphorbiaceae) (547)	Catawa	The latex is taken orally as a purgative.
<i>Jatropha macrantha</i> Muell-Arg. (Euphorbiaceae) (548)	Huanarpo	The root is ground and boiled. The infusion is taken orally as a depurative.
<i>Nicotiana tabacum</i> L. (Solanaceae) (549)	Tabaco	Used for ritual purposes. The leaves are smoked in ayahuasca rituals.

Table 1 (continued)

Scientific name, family and voucher specimen number	Ese'ēja name	Disease treated and use
<i>Petiveria alliacea</i> L. (Phytolaccaceae) (550)	Mucura	The leaves are taken orally as an infusion to treat colds.
<i>Phyllanthus niruri</i> L. (Euphorbiaceae) (551)	Chancapiedra	The whole plant is taken orally as an infusion to treat kidney diseases.
<i>Piper angustifolium</i> R. et. P. (Piperaceae) (552)	Matico	The leaves are boiled and the infusion is taken orally to treat different diseases.
<i>Pothomorphe peltata</i> (L.) Miq. (Piperaceae) (553)	Hoja Santamaría	To treat external ulcers. The leaves are ground, cooked in water and used in external washes.
<i>Psidium guajava</i> L. (Myrtaceae) (554)	Guayaba	The leaves and roots are boiled in water and taken orally to treat diarrhea.
<i>Sapium marmieri</i> Huber (Euphorbiaceae) (555)	Caucho masham	The latex is mixed with water and taken orally as a purgative.
<i>Triplaris americana</i> L. (Polygonaceae) (556)	Tangarana	The bark is boiled in water and the infusion is taken orally to prevent different diseases.

Voucher specimens were collected by Cristian Desmarchelier.

The central idea of shamanism is to establish a means of contact with the supernatural world through the ecstatic experience of a professional and inspired intermediary, the shaman (Hulkrantz, 1978). According to our informants, the ayahuasca ritual is also used in shamanic initiation. They described it as follows.

'If the person to become a shaman is worthy, the Mother of the Rope will show him the plants in the forest, and teach him their medicinal use. If the plants like or want him, he will be surrounded by them and be suspended in the air. Then, the initiate will start the learning of medicine. This may be done under the guidance of an older shaman as a teacher, or by himself. He will keep a strict diet and total sexual abstinence during the period of apprenticeship. It is through the diet that the plants will reveal themselves to him.'

3.2. Causes of illness

According to the concept of the Ese'ēja, illness can be caused by accident, distraction or indolence, or by evil powers. These evil powers come either from the direct action of a malicious shaman or from interactions with the Devil, who can appear in two different ways, as follows.

'*Chullachaqui* (or *Sacharuna*) lives in the forest. One can find him during the night. He adopts the form of some friend or well-known person, except for one of his feet, which resembles that of a goat, a deer, a dog or some other animal. In some occasions it is possible to become his friend, but in most cases, an encounter between a human being and this Devil will result in the person becoming mad or ill. *Tunchi* also wanders in the forest during the night. Nobody can see him, but he can be

heard hissing. If he hisses three short times, somebody will fall ill or die.'

3.3. Medicinal plants

As a result of shamanism, the Ese'ejá culture developed and recognizes a number of folk therapeutic agents originated from plants and animals. For example, the stem sap of 'Ojé' (*Ficus insipida*), 'Caucho masham' (*Sapium marmieri*) and 'Catawa' (*Hura crepitans*) is used as a purgative and to treat intestinal parasitic infections. Diarrhea is treated with 'Guayaba' (*Psidium guajava*), ocular infections with the ground bark of 'Fariña seca' (*Ourantea* spp.), and skin itches with 'Caña agria' (*Gynerium sagittatum*). The medicinal and ritual plants used by the Ese'ejá are listed in Table 1. Some plants that were mentioned by the informants could not be identified, such as 'Achunihuasca' (taken as an aphrodisiac), 'Ajinjillo', 'Moronga' and 'Nonsha rao' (for insect bites and to treat other skin diseases), 'Pucun gordo' (to treat diarrhea) and 'Diente de jergón' (to treat snake wounds).

4. Discussion and conclusions

The medicinal flora of the Ese'ejá consists of a wide variety of species which potentially may provide therapeutic agents to treat different diseases. However, the use of 'ayahuasca' suggests that many diseases that affect these people appear to be of a psychosomatic nature, as is the case for other Amerindian groups (Luna, 1984a, 1984b; Chase-Sardi, 1987; Schmeda-Hirschmann, 1993). The existence of shamans is necessary for an ethnic identity of the Ese'ejá. The social role played by a shaman (healer) in this culture is quite similar to that in other ethnic groups belonging to different linguistic families (Arenas, 1981).

The psychological effects of ayahuasca described here are in concordance with those described by Pages Larraya (1979) for the Ese'ejá groups in Bolivia. According to this author, there are three forms of use of ayahuasca, namely communal, shamanic and individual (Pages Larraya, 1979). The present authors have not seen communal use, probably due to scattered distribution of these people along the Tambopata river.

The addition of 'Chacrana' (*Psychotria viridis* Ruiz et Pavón, Rubiaceae) (Pages Larraya, 1979; Luna, 1984a, 1984b; Cabieses, 1993) and 'Chiricsanango' (*Brunfelsia grandiflora*) (Luna, 1984a; Soukup, 1986; Cabieses, 1993) in the preparation of the beverage has been stressed in other regions of Amazonia. However, this practice has not been observed by the authors. Tobacco, on the other hand, is a medicine in itself, and must be used in the ayahuasca ritual. Many Amerindian groups also use tobacco in healing rituals, and often stay at this level of shamanic learning, such as the Ayoreo in Paraguay (Schmeda-Hirschmann, 1993).

The latexes of 'Catahua' (*Hura crepitans*) and 'Ojé' (*Ficus insipida*) are considered to be very powerful 'plant-teachers' when taken by themselves in some parts of northwestern Amazon (Luna, 1984a). However, the Ese'ejá only use these for medicinal purposes. Other plants mentioned here have also been considered as having 'mothers', such as 'Tangarana' (*Triplaris americana*), 'Abuta' (*Abuta grandifolia*), 'Amazizo' (*Erythrina ulei*), 'Chiricsanango' (*Brunfelsia grandiflora*) and 'Remo caspi' (*Aspidosperma excelsa*) (Luna, 1984b). The use of stem bark of 'Chuchuhuasi' (*Heisteria pallida* Engl., Olacaceae) as a masculine aphrodisiac is very common among the Machiguengas (Rutter, 1990) in the Manu River, also belonging to the region of Madre de Dios. This use has extended to other regions of Peruvian Amazonia. However, it is not a traditional practice among the Ese'ejá. 'Abuta' (*Abuta grandifolia*) is also used by the Machiguengas to treat anemia (Soukup, 1986) and for birth control. 'Caña agria' (*Gynerium sagittatum*) has been reported to be effective as a diuretic and in the treatment of asthma (Soukup, 1986; Rutter, 1990), while 'Catahua' (*Hura crepitans*) is considered to have many uses (Rutter, 1990). Of special interest are 'Sangre Grado' (*Croton erythrochilus*) and 'Sacha jergón' (*Dracontium* sp.), both of which are considered to have anticancer properties (Rutter, 1990; De Feo, 1992). To follow up our field research and in order to contribute new knowledge on active principles of these plants, biological and chemical analyses are currently being undertaken in our laboratory.

Medicinal plants discovered by traditional

societies living in areas with high biological diversity have proved to be an important source of potentially therapeutic drugs (Cox and Balick, 1994). However, these cultures should bear a tradition in which healers transmit their plant knowledge from generation to generation. In this field study, the authors observed that this tradition, although still present among the Ese'ejá, is being rapidly lost due to the influence of Western culture. The impact of Western medicine and its apparent efficacy in healing many diseases has certainly been the reason for a great number of people to ignore the uses of plants for medicine (Filipov, 1994). On the other hand, cultural and demographic pressures, mainly coming from the city of Puerto Maldonado, are compelling the Ese'ejá population either to search for new lands or to perform economic activities different from their traditional ones. This is leading to the acculturation of these people, including the loss of their native language, the increasing practice of sedentary agriculture and the displacement of their traditional health systems. Indeed, the authors were informed that only five or six men belonging to the Ese'ejá communities in the Tambopata River could still speak the Ese'ejá dialect in a fluent manner, and the replacement of elderly shamans and 'eyami tekwas', ultimate carriers of the Ese'ejá culture and traditional medical knowledge, by younger ones is becoming more difficult due to the loss of interest of the new generations.

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