

UNIVERSITY OF BRITISH COLUMBIA

Are Sacred Plants Important for the Healing and  
Reunification Processes of Indigenous Peoples  
from the Americas?



Victor Sauca  
58368151  
FNIS 100  
Dr. Daniel Justice  
09/12/2016  
s.auk@hotmail.es

## **INTRODUCTION**

Indigenous peoples' culture across the Americas have historical and contemporary close relations with the environment they live in. Their culture and knowledge come from, and are in relation to, their lands and the elements that constitute those lands. Culture as such is a source of knowledge and the land is also a laboratory where Indigenous observe and understand the way in which the world works. Some of those observations are made through altered states of consciousness produced by the ingestion of psychedelic plants, or the combination other non-psychedelics such as tobacco with psychedelic ones (Tupper & Labate, 2014; Carod-Artal, 2011; Paper, 1989). Indigenous peoples of the Americas know those plants as “sacred plants,” “plant teachers,” “medicine plants,” or “plants of power” (Paucarr,2009; Tupper, 2002, p.501;).

Historically, sacred plants consumption is associated with ceremonial and religious purposes and their usage was widespread before the European colonization. The first religious colonizers from the beginning associated the consumption of sacred plants with practices of the devil and “they soon refused to recognize the religious and mystical significance of these practices (Carod-Artal, 2011, p. 47). In consequence, these plants were, and continue to be, object of systematic and systemic prosecution and their usage was subject to discrimination and banishment (Tupper & Labate, 2014; Guzmán, 2008). That misled colonial notion about the usage of psychoactive plants settled the future for the discriminating policies that most modern states across the Americas have with psychedelic plants consumers. It also shaped the way in which Western science conceptualize the effects and usage of sacred plants within their cultural context and the scientific environment.

The negative perception of Westerns about psychedelic plants consumption pushed Indigenous peoples to hide their ceremonial practices and to conduct them clandestinely. The

## SACRED PLANTS' ROLE

temporary silence and disappearance of ceremonies and sacred plants consumption from public knowledge helped create the idea that those are in fact backward practices. Since the objectification of knowledge by Western science took over, the role of plant teachers as “cognitive tools” or sources of knowledge has been mainly perceived as charlatanism or just reduced to *mere* contexts of cultural practices (Tupper & Labate, 2014, p. 76). The orthodox Western science poses reason as the source/pathway to obtain knowledge but rejects the usefulness of altered states of consciousness by representing them as sources of bias.

However, Indigenous peoples did not abandon their ceremonial practices and sacred plants are present, perhaps, as much now as they were in the past. They continue to be the offerings for the spirits or cognitive tools for Indigenous peoples in ceremonial practices. Sacred plants have a key role in the transmission and sharing of knowledge in an intercultural, transcultural, and transgenerational scope. Moreover, these plants are a matter of interest among a number of contemporary scientists, who see them as sources of potential benefits and knowledge they can contribute to the entire world (Mabit & González, 2013; Anderson, 2012; Balick & Cox, 1997). This paper describes and gives insights into the contemporary role of *sacred plants* among Indigenous peoples and Western science. It explores the sociological, cultural, spiritual, cognitive, and medical importance of these plants for Indigenous peoples across the Americas at the individual and collective levels. It also presents information about the possible mediator role that these plants might have in the convergence of Western science and Indigenous knowledge. Exploring the Indigenous peoples' relations with four specific sacred plants (ayahuasca, peyote, tobacco and coca), I hope this paper will help give its readers a broad view of the relations surrounding Indigenous sacred plants and raise awareness and interest in those relations within the context of Indigenous peoples healing.

## **INDIVIDUAL AND COMMUNITARIAN DIMENSIONS**

## SACRED PLANTS' ROLE

Sacred plants, specifically psychedelic ones, are used by Indigenous and some non-Indigenous medicine men/women as a cognitive tool to sharpen their perceptions and understanding of the environmental interaction, diseases, spirituality, cosmologies, etc. They share that knowledge obtained from, or through, those plants during ceremonies, social and cultural practices. Each sacred plant, or medicine made from it, has its own potential and specific uses and knowledge and are representative of certain indigenous groups in particular, though many of them can overlap on their usage. Medicine plants such as ayahuasca (*Banisteriopsis caapi*), peyote (*Lophophora williamsii*), tobacco (*Nicotiana tabacum*, the most used variety of tobacco in North America contemporarily (Paper, 1989)), coca (family of the *Erythroxylaceae*), sacred mushrooms (entheogen varieties such as *Psilocybe panaeolus/mexicana*, and *Stropharia* (Carod-Artal, 2014), Angel's trumpet (*Brugmansia suaveolens*), to name a few, are generally well known among indigenous peoples in the Americas (Del Río, Córdoba, 2016; Carod-Artal, 2014; Tupper & Labate, 2014; Mabit & González, 2013). Most of these plants' domestic names may change depending on the place and people they are found.

### *Ayahuasca*

Sacred plants contribute to Indigenous communities' well-being. They are used as physical and spiritual medicine or as offers to the earth and spirits. The use of these plants as an alternative to Western medicine is not only among Indigenous peoples, people from all over the world come to heal in sacred ceremonies conducted with Indigenous and non-Indigenous medicine men/women. Nowadays, it happens especially in South America where there are less strict policies regulating sacred plants usage and ceremonies due to the ongoing hard work that Indigenous leaders and medicine men/women do to protect their traditional medicine (Mabit & González, 2013). Ultimately, ayahuasca—a psychotropic brew native to the Amazon and traditionally used in indigenous medicine rituals, is one of the most (apart of

## SACRED PLANTS' ROLE

tobacco and coca) used and at the same time disrespected sacred plants in South America and around the world (Tupper & Labate, 2014; Mabit & González; 2013; Anderson, 2012).

Several studies to measure ayahuasca's effectiveness have been conducted in laboratories and natural settings (Anderson, 2012). Most participants have reported positive results overcoming substance dependence, suicidal thoughts, depression, anxiety, emotional pain, depression, stress, physical health (i.e. asthma, weight loss) (Kavenská & Simonová, 2015; Loizaga-Velder & Verres, 2014), improved performance taking neuropsychological tests, and higher psychological adaptation (Bouso et al., 2012). Neither addictive potential nor cognitive impairments have been found among chronic users of ayahuasca (Bouso et al., 2012; Kavenská & Simonová, 2015; Loizaga-Velder & Verres, 2014).

### *Peyote*

Peyote is a sacred plant widely used among Indigenous tribes in Mexico, the U.S and some of Canada (Beck & Walters 1977). Its consumption in ceremonial context is called Peyotism, specifically in the US and Canada. Although this plant is native to Mexico, its introduction to North America is complex. That is because many Plain tribes have their own stories of its origins but “most written records indicate that the Navajos were introduced to Peyote only recently” (241). Nonetheless, the Navajo's oral traditions had predicted “the coming of Peyote” long before (241). The medicine men knew about this and they recall that one of their sacred plants left “going south” and that “the plant spoke. He [peyote] said *he* would return” “to the Navajos when the time was right, when the Navajos would be in need of that” (242). Halpern et al. (2005) found that the long-term use of peyote within ceremonial settings in the Native American Church (NAC) by the Navajo people in the US, has not negative effects on psychological and cognitive skills of the consumers Although the long-term use seems not to produce better psychological, neuropsychological, and cognitive

## SACRED PLANTS' ROLE

performance among its users, when used in ceremonial contexts it does improve their mental health and is effective for treating alcoholism (Webb, 2011).

### *Offering: Tobacco and Coca*

The ritual use of tobacco and coca are among the sacred plants unique to Indigenous peoples in the Americas (Cordova, 2016; Paucarr, 2009; Paper 1989). The “primary purpose of tobacco smoke” usage in some North American nations, such as the Iroquois, Lakota (Sioux), Black Foot, is as an “offering for the spirits,” as a means of communication with them (Paper, 1989, p. 5). It is not necessary to inhale or to burn tobacco, its leaves can be thrown directly into the fire, water or placed on the ground, sacred stones, and trees. When not burned, tobacco leaves are offered in exchange for something taken from the land for sacred use and to meet human needs. For those peoples, tobacco is the most sacred gift given by the spirits. In South America, Indigenous peoples use coca leaves as offerings to their spirits or their relatives inhabiting Mother earth (Quigua, 2016). Ati Quigua, a medicine woman from Santa Marta, Colombia, says that coca leaves also are the “symbol of mental, emotional, spiritual, and physical decolonization which inspired the *cocalero* movement” in Bolivia for electing its first Indigenous president, Evo Morales. At difference from Northern American Indigenous nations, Indigenous peoples from the tropics in North and South America also ingest tobacco leaves mixed with other substances to induce trance and for “shamanic purposes” (Paper, 4). Although Ayahuasca is one of the most used sacred plants by many Indigenous peoples in South America, they may also use tobacco, coca, San Pedro, angel’s trumpet, or other local plants.

The connection of Indigenous peoples with their non-human relatives through the offering of tobacco and coca reflects the sociological aspects of these sacred plants. It reminds them the reciprocity needed to inhabit Mother earth in order to maintain a sustainable balance.

## SACRED PLANTS' ROLE

More than being just superstitions, the act of *offering* is a simplified action based on the complex knowledge of Indigenous cosmologies. Del Rio (2015), a Peruvian *yagesero*, states that the Andean culture recognizes and expresses the energies of non-human relatives by thanking and praying to them, not only as symbols of those energies but also recognizing those energies. Andean cosmologies expressed, or masked, as religion helps children and other people not initiated on medicine plants to have balanced relationships and to recognize those energies.

### *Walking with sacred plants*

Andrés Cordova (personal communication, November 2, 2016), a *yagesero*<sup>1</sup> from Putumayo, Colombia, explains that “sacred plants have divine character” which “guides the cultural, traditional, and psychological” structures of a people and “are expressed through sociological ways.” Nicolas Paucarr (2009), a Quero medicine man from Peru, says that “*plantas de poder*” (sacred plants) allow us to combine both the “physical reality” with “the reality we do not know” (3:28-3:37). Which is corroborated by Cordoba who says that “the same plant teaches what the great *mysterias* are,” and Alonso del Río (2015), who says that “sacred plants make conscious the unconscious world” 00:14:08-00:14:13). The three of them state that both worlds not only coexist but also can coexist in a conscious interactive way. The plants teach what the great *mysterias*’ animals, plants, and minerals of power are”<sup>2</sup> (Cordova, 2016). By showing those mysteries or unknown realities sacred plants “help humans realize they are a whole unity with the earth and the universe” (Cordova, 2016).

Thus, these plants are a key element among many Indigenous peoples for understanding their environment and living in a holistic way with all the elements on the

---

<sup>1</sup> Yagesero is the medicine man who prepares and conducts Ayahuasca/Yage ceremonies in some Indigenous peoples in South America. Yageseros are specialized in Ayahuasca, but many of them are knowledgeable about other sacred plants, too.

<sup>2</sup> Andrés Cordoba says refers all the sacred plants he had experience with.

## SACRED PLANTS' ROLE

earth. The sociological expressions of the knowledge acquired from sacred plants is passed down to the next generations “to maintain the traditions and culture... the same oral traditions and ceremonies under the power of these plants and spiritual ceremonies.” It may explain why when sacred plants are commodified or taken out of their spiritual or traditional context become dangerous for the society. Tobacco and coca are a good example of that dangerous potential of sacred plants commodification. Also, angel’s trumpet (which is most used in Colombia and Ecuador to ‘hypnotize’ victims of robbery), and more recently Ayahuasca (which is currently under capitalist interests) are some examples of the danger of disrespect towards the sacred dimensions of tradition and culture regarding psychedelics (Vice, 2012).

Some scholars assert that the absence of addiction to traditional psychedelic beverages could be due to the “protective safeguards” provided by the ceremonial context and the properties of the brew itself when prepared with traditional methods (Mabit & González, 2013; Tupper, 2002, p. 510). Moreover, increasing addiction treatment centers and drugs and alcohol addict people rely on Indigenous medicine and ceremonies that include the usage of sacred plants to treat those addictions successfully. Whereas the ceremonial and spiritual traditions can guarantee the holistic integration of these plants into the modern society, those plants guarantee the continuation of the holistic connection between humans, the environment, and the spiritual dimension. The protective safeguards that are passed down through generations as cultural knowledge are critical for the survival of both Indigenous peoples and non-Indigenous peoples without destructing the earth. This is one of the main reasons why Indigenous leaders and medicine men/women are working to preserve sacred plants from commodification, privatization, and commercialization (Manifesto AITM, n/d). “This knowledge is brought to the cities but kept in the jungle” (Córdoba, 20162:00).

Del Río (2015) explains that working with sacred plants is like walking, “sacred plants are one leg and our actions the other” (00:18:29-00:19:20). Ayahuasca users must be able to

## SACRED PLANTS' ROLE

actualize in their daily life, without addictive dependency of the beverage, what they have learned during the ceremonies. Thus, the traditional protocols of the usage of sacred plants call for teamwork, which does not mean dependency. The “*trabajo*” (work) with sacred plants require individual effort to change one state of consciousness (00:22:10). The *magic* lies in team work, and the material work is the best way to put into practice what the medicine teaches. Simpson (2012) says Indigenous peoples are cultures of presence, which is cultures based on creation. Sacred plants thus ask for creation, which begins at the domestic level. It is an interactive work with nature at the individual level which brings the harmony to the collectivity. It is a process of reconciliation with oneself first, and then with all our relatives and the land.

## **THE INTERCULTURAL DIMENSION**

Understanding the relationship between sacred plants and Indigenous peoples across the Americas is important to comprehend many of the current Indigenous-driven movements rising in this continent. That is because some of us as outsiders or spectators just know what the media let us see of those movements, but the deepest rationale underlying them are not mainstream since it diverges from the colonial ruling status quo and the rational western scientific knowledge. To acknowledge the millennial relation of Indigenous peoples with sacred plants, its inherent spirituality and the role of those plants as intermediaries in the interaction between humans, non-humans, and the spiritual dimensions, is more likely a step backwards in the minds of most people unfamiliar—or knowledgeable but in a superficial manner—with the complex interaction they are part of.

“Every sacred plant has its own language” (del Río, 2015, 29:39-30:55) and “each [Indigenous]peoples have their own plants of power and show what their cultural legacy is for strengthening and rescuing all the ancestral traditions by order of the Great Spirit or *Conjuero*”

## SACRED PLANTS' ROLE

(Cordoba, 2016). For taking advantage of the diversity of Indigenous strengths and knowledge, in the last decades took place an alliance among Indigenous peoples of North, Center, and South America. The Four Worlds International Institute (FWII), established in 1982 by Native American leaders, and the Inter-American Council on Indigenous Spirituality (CISEI in Spanish), established in 1999 by Indigenous leaders from all over the Americas, started to lead a regional holistic change and re-emergence of these peoples (CISEI, 2016; FWII, 2015). Both organizations are influenced by ancestral prophecies such as the Reunion of the Condor and the Eagle and the Return of the White Buffalo. The FWII "believe that there is a Fourth Way: Empowerment and Constructive Development" for an "Indigenous response" to the more than 500 years of systematic and systemic destruction driven by colonization (FWII, 2015, p.25). The first three ways are assimilation, resignation, and resistance which do not contribute to a holistic coexistence of Indigenous and non-Indigenous nor of all humans with the land. That Fourth Way is holistic and is guided by a set of principles that "constitute the foundation for the process of healing and developing ourselves (mentally, emotionally, physically, and spiritually), our human relationships (personal, social, political, economic, and cultural) and our relationship with Mother Earth" (FWII, 2015, p.14).

Regarding sacred plants, the CISEI (2016) states that "The work accomplished by ancestral master plants and traditional medicine in the process of conscience transformation, helps give way to a thorough investigation of the archetypal processes of human conscience at the collective and individual level." Hence, sacred plants occupy an important place in the alliances among Indigenous peoples in the Americas. From an Indigenous perspective, spirituality cannot be imposed, rather it is shared. When alliances and gatherings take place, communication can be limited given the diversity of languages and cultures which can undermine spirituality and knowledge sharing. As such, "the most difficult part" during the process is "to talk about spirituality." For the participants, the "best way to understand

## SACRED PLANTS' ROLE

[spirituality] is through ceremonies” (CISEI). Hence, it supports some scholars such as Anderson (2012, p. 47), Tupper (2002), and Tupper & Labate (2014), who see in psychedelic drugs or medicine the latent capacity to make the mind “malleable,” expand educational borders, and be a cognitive tool. as have argued regarding the potential of sacred plants as cognitive tools for sharpening human senses and understanding.

Gathering both the traditions of North America and South America, some Indigenous leaders conducted a ceremony called “The Four Altars Ceremony” which, according to Del Rio (2015), is one of the most advanced ceremonies since it:

*“allows us to interact with the most important archetypes of life, those whom from the beginning of humanity were recognized and honored such as the water, earth, fire, and air. And to understand, thanks to the medicine, what each one of those archetypes represent in our daily life and how through our expressions we can heal in depth the most important relations we have such as that with our ancestors, parents, work, money, sexuality, our relation: with all that surrounding us” (00:31:43).*

He explains that we as humans need the help of sacred plants who are here to “guide” us, but also those plants need our pragmatism for being effective (00:39:30-00:42:29).

Moreover, he continues, we have to protect those plants and their native land in order to preserve the medicine. The knowledge or consciousness that humans receive from sacred plants comes with a responsibility. His explanation is supported by the “2001 Declaración de Tarapoto. Medicina Tradicional y Plantas Sagradas” (DTMTPS) (the DTMTPS is annexed in Mabit & González, 2013, p.71). After having conducted some ceremonies with medicine plants and meditated about the contemporary problems that traditional medicine faces, several medicine men and other participants from Peru, Ecuador, Colombia, Venezuela, and Gabón, Africa signed the DTMTPS. They declared that:

*“We affirm that our traditional medicine is a fundamental value of our peoples and can contribute in important ways to health and spiritual integrity of humanity.”*

## SACRED PLANTS' ROLE

*“We consider that the knowledge offered by sacred plants and which has been passed down from ancestral Indigenous peoples and other nacionalidades is the base for the development of traditional medicine” (in Mabit & González, 2013, p. 71).*

They also committed to:

*“Start specific actions in the World Intellectual Property Organization (WIPO) for the recognition of collective intellectual property rights to counter the privatization of common heritage” (in Mabit & González, 2013, p. 71).*

Other terms included in the declaration are the protection of the rainforest and medicine plants, to push governments to formulate policies that protect and promote traditional medicine, and the creation of an Ayahuasca/Yagé International Network of Traditional Healers to exchange and strengthen the knowledge of traditional medicine.

Therefore, the protection of sacred plants has further implications than cultural, medicinal, and spiritual ones because it requires the preservation of the forests where many of them grow. Indigenous peoples need to keep the native forest of many of those plants in order to preserve their ceremonies, medicine, and knowledge. Deloria (2003) explains that some the Indigenous ceremonies that “have the highest retentions rate” is due to their “extraordinary planetary importance” (p. 280). Thus the alliances taking place to revitalize, unify, and develop a new way of development guided by Indigenous cosmologies, are critical for the well-being of the humanity as a whole, not only for Indigenous peoples.

## **WESTERN SCIENCE AND INDIGENOUS KNOWLEDGE**

Sacred plants are potential agents that could have a role in the convergence of Indigenous knowledge and Western science. Mabit (1998) call it a “reciprocal fecundation of cultures” in which the rational and cold thinking of the “Wester Serpent” and the “Indigenous Serpent” of the “intuition,” medicine, and “impulsive passion” will come together (p.2). That convergence creates possibilities where “empirical traditions and indigenous ways of knowing

## SACRED PLANTS' ROLE

could be epistemologically—and perhaps ultimately politically—innovative” for the general society (Indigenous is in lower case in the original text, Tupper & Labate, 2014, p. 76). This fruitful integration (not assimilation) would be based on the strength of diversity instead of homogeneity. For achieving a holistic and sustainable development, Indigenous peoples can contribute with their mastery on sacred and plants and other medicines and western science with its technologies.

Because of the close relations of Indigenous peoples with sacred plants and the land in general, they know how nature *speaks* and the ways through which it manifests. However, across history, any use of sacred plants has been discredited by the ruling ideologies of the orthodox scientific community. The reasons might be the superficial, or only physical knowledge, that those scientists have about these plants or the pressure to conform Western social standards that punish their consumption. In that regard, Tupper & Labate (2014) propose a shift in the perception of some psychedelic master plants within the scientific circle. They equate the usage of psychedelic plants with scientists' tools, such as a microscope, as a means to sharpen human senses and perceptions. They suggest that empirical Indigenous traditions might “foster new kinds of intellectual and cultural creativity within Western societies” and that the convergence of western technologies and knowledge obtained from sacred plants “may represent the cross-cultural interchange of a powerful kind of cognitive tool” (p. 76). Although quite new and perhaps challenging to the dominant colonial status quo, that proposition, or at least the idea underlying it, is not new for Indigenous leaders because they are conscious of what it is that Western science lacks. The closed mindedness of the dominant Western style of reasoning is the main obstacle a holistic integration of both Indigenous and Western science.

The strength of this alliance would lie on the fact that most ancestral Indigenous traditions and knowledge come from the interaction and teamwork with the land and their

## SACRED PLANTS' ROLE

non-human relatives rather than from limited ways of reasoning. It is a knowledge and wisdom in interaction with the land, not against it. In contrast, Western science and medicine go against nature, it exploits and overexploits nature. The Western culture does not have a cosmology or epistemology upon which to build a respectful and reciprocal relation with master plants (Mabit & Gonzalez, 2013). Therefore, Indigenous peoples' traditions and ceremonies are centuries-proved safeguards against potential addictive and exploitative practices against the land that take place within the capitalist society. Moreover, that spiritless Western perception of nature has always put Mother Earth as a source of natural resources to serve white men's—the so-called pinnacle of civilization— interests. Therefore, there is a need to 'insufflate life' to the general population's understanding of the relations between humans and earth; and Indigenous knowledge has this breath of life.

## CONCLUSION

The potential of sacred plants as intermediaries between Indigenous and non-Indigenous peoples, humans and non-human relatives in the earth, and humans and spirits, is an important factor to analyze for better understanding of their status among Indigenous peoples. More important, that potential must not be abstracted from its traditional context. Given the benefits inherent to the interaction with sacred plants, a *real* reconciliation with Indigenous peoples will mean a reconciliation with earth. A holistic reconciliation with Indigenous peoples will have the power to transform the relations that humans have with the land. Indigenous peoples' healing comes with the healing of the earth. A model of development proposed by some Indigenous nations is the most viable if we take into account all the environmental and social failure that western science has turned to be. The Indigenous model encloses a collective and holistic shift guided by principles of respect for diversity and the singular contributions that each nation can make to heal every one of us and Mother Earth. This development itself is reconciliatory and healing. It is open to contributions from Western

## SACRED PLANTS' ROLE

science. Nowadays, humanity has the technologies and the knowledge to transform its future and it is up to us to turn our backs or to accept what Indigenous peoples have to offer for the healing of all of us. I would like to end this paper with a quotation from Tupper (2002):

*Just as a sharp knife can be used for good or ill, depending on whether it is in the hands of a skilled surgeon or a reckless youth, so too can entheogens[psychedelics] be used or misused” (p. 510).*

Bibliography

- Anderson, B. T. (2012). Ayahuasca as antidepressant? psychedelics and styles of reasoning in psychiatry. *Anthropology of Consciousness*, 23(1), 44-59. doi:10.1111/j.1556-3537.2012.01056.x
- Beck, P. V., & Walters, A. L. (1977). *The sacred: Ways of knowledge, sources of life*. Tsaile, Ariz: Navajo Community College.
- Bouso, J., Gonzalez, D., Fondevila, S., Cutchet, M., Fernandez, X., Barbosa, P., Riba, J. (2012). Personality, psychopathology, life attitudes and neuropsychological performance among ritual users of ayahuasca: A longitudinal study. *Plos One*, 7(8), e42421. doi:10.1371/journal.pone.0042421
- Balick, J. & Cox, P. (1997). *Plants, people, and culture*. New York: Scientific American Library.
- Consejo Interamericano Sobre Espiritualidad Indígena. (2016). *Declarations*. Retrieved from <https://ciseiweb.wordpress.com/declarations/>
- Deloria, V. (2003). *God is red: A native view of religion* (3rd ed.). Golden, Colo: Fulcrum Pub.
- Del Río, A. (2015, October 5). Interview - Alonso Del Rio - Working with Plant Medicines [Video file]. Retrieved from <https://www.youtube.com/watch?v=0GxAaR3RN8M>
- Fourth World International Institute. (2015). *The Fourth Way: An Indigenous Contribution to Building Sustainable and Harmonious Prosperity in the Americas and Beyond-2015-2019*. Retrieved from <https://es.scribd.com/document/265671129/The-Fourth-Way-2015-2019>

- Guzmán, G. (2008). Hallucinogenic Mushrooms in Mexico: An Overview. *Economic Botany*, 62(3), 404-412. Retrieved from <http://www.jstor.org/stable/40390479>
- Halpern, J. H., Sherwood, A. R., Hudson, J. I., Yurgelun-Todd, D., & Pope, H. G. (2005). Psychological and cognitive effects of long-term peyote use among native americans. *Biological Psychiatry*, 58(8), 624-631. doi:10.1016/j.biopsych.2005.06.038
- Mohagheghzadeh, A., Faridi, P., Shams-Ardakani, M., & Ghasemi, Y. (2006). Medicinal smokes. *Journal of Ethnopharmacology*, 108(2), 161-184. doi:10.1016/j.jep.2006.09.005
- Mabit, J. & González, J. M. (2013). Towards a transcultural medicine: Reflections and proposals based on the experience in Takiwasi. *Journal of Transpersonal Research*, 5(2), 49-76.
- Kavenská, V., & Simonová, H. (2015). Ayahuasca tourism: Participants in shamanic rituals and their personality styles, motivation, benefits and risks. *Journal of Psychoactive Drugs*, 47(5), 351-359. doi:10.1080/02791072.2015.1094590
- Loizaga-Velder, A., & Verres, R. (2014). Therapeutic effects of ritual ayahuasca use in the treatment of substance dependence - qualitative results. *Journal of Psychoactive Drugs*, 46(1), 63-72. doi:10.1080/02791072.2013.873157
- Manifiesto-MTI. (2016). *American Indigenous traditional medicine*. Retrieved from <http://www.manifiesto-mti.takiwasi.com/indexen.php>
- Paper, J. D. (1989). *Offering smoke: The sacred pipe and Native American religion*. Edmonton: University of Alberta Press.
- Paucar, N. (2009, December 29). 9A plantas de poder del Perú: Nicolas Paucar [Video file]. Retrieved from <https://www.youtube.com/watch?v=m9qKHVxo4LY>

## SACRED PLANTS' ROLE

Quigua, A. (2016). *La coca es una planta espiritual de paz y no de guerra*. Retrieved from <https://ciseiweb.wordpress.com/2016/08/09/la-coca-es-una-planta-espiritual-de-paz-y-no-de-guerra/>

Simpson, L. (2011). *Dancing on our turtle's back*. Winnipeg, Manitoba: ARP Books.

Tupper, K. W., & Labate, B. C. (2014). Ayahuasca, psychedelic studies and health sciences: The politics of knowledge and inquiry into an Amazonian plant brew. *Current Drug Abuse Reviews*, 7(2), 71-80.

Vice. (2012, May 11). World's scariest drug (Documentary exclusive) [Video file]. Retrieved from <https://www.youtube.com/watch?v=ToQ8PWYnu04>

Webb, H. S. (2011). The use of peyote as treatment for alcoholism within the NAC community: Reflections on a study. *Anthropology of Consciousness*, 22(2), 234-244.  
doi:10.1111/j.1556-3537.2011.01051.x