

## CONFERENCES

a report from the  
**international conference of hoasca studies,**  
 november 2-4, 1995

**'The encounter between  
 scientific knowledge and  
 coboclo<sup>1</sup> wisdom...'**

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**T**HE UNIÃO DO VEGETAL (UDV) had its world debut in Rio de Janeiro by organizing and hosting the International Conference of Hoasca Studies, November 2-4, 1995. The UDV, literally 'the Union of Vegetal,' was founded by Jose Gabriel Costa in a remote area of Brazil on July 22, 1961. The Vegetal is better known as Ayahuasca in North America, and in Brazil this beverage goes by the name Hoasca. The UDV is the largest single organization that uses Ayahuasca as a religious sacrament, and its membership presently exceeds 5,000 individuals who are distributed among 60 nucleos throughout Brazil. (The Santo Daime is the largest "group" using Ayahuasca but members are split into about seven different directions and all follow different doctrines. At last count, the Santo Daime numbered about 7,500.)

The UDV is a civic-minded organization that makes a significant contribution in volunteer energy towards caring for the sick and elderly and providing food and shelter for women and children. It is actively involved in several ecological projects. In addition, their high regard for family, and especially the future of children, offer a fine example of how a psychoactive sacrament can affect productive interpersonal relationships.



On the bus to the International Conference on Hoasca Studies: Glacus S. Brito and Charles Grob, Medical Codirectors of the conference (front), Ralph Metzner (middle), Dennis McKenna and Jace Callaway (back)  
 photo © 1995 John Fago

<sup>1</sup>Coboclo is the Brazilian word for mestizo, the resulting mix from Indians and Europeans.

One of the UDV's long-term missions is to promote world peace through the wisdom obtained by regular use of the Vegetal. In the summer of 1993 an international team of scientists initiated a study of this beverage, its plant components and 15 volunteers who had used it on a regular basis for ten years or more. This was the Hoasca Project, and many of the presentations at this conference were directly related to this prospective study (see MAPS Research Update Vol. 5 No. 4, pp. 4 & 5).

Unlike more well known Ayahuasca religions in Brazil, the UDV have maintained a very low profile over the years and have worked carefully with bureaucratic agencies to preserve their religious liberties. In fact, several of the reporters covering the conference had never even heard of this organization. This event received wide media coverage on both local and national levels.

#### Set

Just over 800 persons attended the Conference of Hoasca Studies including about 50 people from outside Brazil. About 60-70% of the 800 attendees were UDV members. This event was not only informative but experiential. All participants had the opportunity to participate in formal sessions before and after the conference, where significant amounts of the bitter brew were distributed within a ritual context (not all 800 chose to accept this invitation, however). To say the least, these experiences established important transpersonal and cross-cultural bonds, which heightened trust and openness throughout the crowd.

#### Setting

Our conference site was The Hotel Gloria, a grand old structure which has been renovated over the years to keep pace with international expectations. Besides the Conference of Hoasca Studies, the UDV sponsored two other parallel conferences at the same site: one on health and the other on ecology. The conference facilities were exceptional, as audio visual equipment worth about \$40,000 had been acquired to enhance the presentations. In addition to the lectures, a visual art exhibition was on display to convey images of another world, where no words do justice.

#### Thursday November 2, 1995

The Conference opened with a review course on Ayahuasca, where Gabriel Travini, M.D. from São Paulo, described the botany of the plants that are typically used to prepare this tea; the liana *Banisteriopsis caapi* which contains harmala alkaloids and the leaves of *Psychotria viridis* which provide N,N-dimethyltryptamine (DMT). The Colombian anthropologist Luis Eduardo Luna, Ph.D. reminded us that indigenous peoples of South American used a much wider variety of plant-teachers in their preparations, long before Portuguese rubber tappers began to bring this mystery to the attention of urban Brazilians. Luna spoke from several years of anthropological experience with Peruvian shamans who also use Ayahuasca (Luna and Amaringo 1991). Guilherme Oberlander, M.D. from Rio de Janeiro, gave a fine overview of Ayahuasca-related neuropharmacology, stressing

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International Conference of  
Hoasca Studies  
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the actions of plant alkaloids on the serotonergic system and how harmala alkaloids inhibit monoamine oxidase type A (MAO-A) to facilitate the oral activity of DMT in this unusual binary preparation. American ethnobotanist Dennis McKenna, Ph.D. concluded this session by providing an overview of modern Ayahuasca research; from the early encounters of Richard Spruce almost 150 years ago, on to the pioneering works of Richard Schultes and Bo Holmstedt in botanical and phytochemical analyses, respectively, and up to the present revival of ethnobotany and ethnopharmacology.

Later on that evening, writer and explorer Jonathan Ott transmitted his exceptional version of history and reminded us that it was almost 1,600 years to the day when the 'Pharmacatic Inquisition' began with the destruction of the temple at Eleusis, marking the end of the 'Age of Entheogens', and that we are presently experiencing the 'Entheogenic Reformation'. The curious reader is directed towards further reading of these and other matters in the most comprehensive treatment of Ayahuasca botany and pharmacology ever written (Ayahuasca Analogues: Pangaen Entheogens, Ott 1994). Luis Luna concluded the first day of lectures with another talk, entitled 'History of the Tea Use in the Americas and its Significance in Modern Society', and received a hearty round of applause and standing ovation as he suggested that women take a stronger role in this (presently) male dominated religion. The evening of the first day concluded with a musical show of Andean folk music by the Chaski Group.

### Friday 3 November 1995

Several excellent talks continued on the following day, along with a video of the Hoasca Project as it was documented in Manaus, during June and July of 1993. This work was initially funded by private donations to Botanical Dimensions, a nonprofit research organization supporting the investigation of ethnomedicinally significant plants. From that prospective study, we collected a wide variety of samples which are still in the process of analysis. In my first of three lectures for this conference, I presented the results from phytochemical analyses of several plant and tea samples and reported on their concentrations of DMT and harmala alkaloids. Private funding has been provided for a more extensive phytochemical survey that began by the collection of well documented plant samples throughout Brazil, on the same day, at the end of the dry season (October). In an attempt to determine variations in alkaloid profiles, another collection from the exact same plants will be made in April of 1996 (the end of the subsequent wet season).

Deborah Mash, Ph.D. from the University of Miami, presented her preliminary findings on a pharmacokinetic study of DMT levels in plasma samples that were collected over time from the 15 experienced volunteers who had consumed 2 ml/kg of the tea as part of the Hoasca Project. Some of this work was supported by a \$5,000 grant from MAPS. American psychiatrist Charles Grob, M.D., UCLA-Harbor Medical School,



An informal group listens to Carmiro, son of M. Gabriel, as he speaks about their lives in the forest during the formative years of União do Vegetal.  
 photo © 1995 John Fago

presented the results from a neuroendocrine challenge assay with these same volunteers, and in another lecture provided results from personality and neurophysiological evaluations among the Hoasca users and a group of matched controls (Grob et al. 1996). A Brazilian psychiatrist, Osvaldo Luiz Saide of Rio de Janeiro, presented results from additional psychological evaluations obtained from this same group, concerning the acute effects from Hoasca.

**S**OME OF THE SAMPLES collected during the Hoasca Project were blood platelets (thrombocytes) for receptor binding studies with serotonergic ligands, and initial results concerning platelet serotonin uptake sites have already been published (Callaway et al. 1994). I spoke about these results in my second lecture, and presented new information suggesting a role for Hoasca alkaloids in the treatment of depression and substance misuse, particularly alcoholism. We are already planning additional receptor binding studies in a larger population of regular Hoasca users, which also includes women, to identify the nature of the unique change that was observed in the platelets of the hoasceros. Furthermore, pilot sessions with cocaine addicts using Hoasca in a ritual context have been approved in Brazil. These sessions will be run by medical doctors who are also UDV members.

Mirtes Costa, from the University of Campinas in Brazil, presented her toxicity data on the oral dose of Ayahuasca that is lethal for

50% of the experimental rats (LD50). She estimated that approximately 7.8 liters of the tea would be a lethal dose for a 75 kg human. She seemed surprised when the audience of experienced hoasceros and hoasceras laughed in delight at this outrageous amount. In a subsequent panel discussion it was brought out that this amount would be approximately 50 times a normal human dose and, perhaps more to the point, rats do not vomit!

Elizabeth Andrade, M.D. a cardiologist from the Federal University in Manaus and Glacus de Souza Brito, M.D., president of the UDV Center for Medical Studies, discussed acute physiological effects from the tea using EKG data obtained from the Hoasca Project. The observation of bradycardia (slowed heart rate, < 60 beats/min.) as an acute side effect in some of the individuals has generated considerable discussion over the past two years. Although bradycardia is sometimes seen during sleep and other stages of deep relaxation, it seems of little consequence in healthy individuals. However, it was suggested that in some individuals having weak cardiac function that induced bradycardia could lead to more serious conditions. This matter will be the focus of future studies. The second day concluded with a short panel discussion.

#### **Saturday November 4, 1995**

The final day of the conference opened with an institutional profile of the UDV, by Edison Saraiva Neves, M.D., president and general director of the UDV. A round table discussion followed concerning legal aspects of Hoasca in

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Deborah Mash, Jace Callaway and Dennis McKenna answer questions after a panel at the International Conference of Hoasca Studies photo © 1995 John Fago

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both Brazil and the United States. Domingos Bernado, a civil lawyer and high official within the Brazilian National Counsel on Drugs (CONFEN), described his earliest recollections of the tea as a potential drug problem that came to his attention through dubious sources over 10 years ago. He told of his past mistakes in attempting to orchestrate a prohibition of its use under any circumstance. After a lengthy and thorough investigation of the matter, however, he was absolutely convinced of the benefits associated with regular Hoasca use, and since then he has passionately defended the right of individuals to celebrate their religion with this beverage. He went on to state that "the law provides a service to human kind when it does not get in the way," and this proclamation was followed by a solid round of applause. This public official's rapid recovery from ignorance is a unique case history, worthy of serious and careful consideration.

The middle part of the day opened with a talk on dimethyl tryptamines (DMTs), by the Argentinean researcher Ciprian Olivier, M.D., a student of the early psychedelic pioneers Fischer, Hoffer and Osmond, who had researched these endogenous compounds as possible 'schizotocicins' a few decades ago. I followed with a talk on a previously published hypothesis stating a useful role for endogenous DMTs, i.e. normal dreaming, since these and other neuroactive indoles are found in normal humans and laboratory animals in addition to psychotic individuals (Callaway 1988). Jonathan Ott adroitly summed up this idea up with the term 'endohuasca' (Ott 1994). Chemical and mechanistic similarities were illustrated to highlight the similarities between endohuasca and Ayahuasca neuropharmacology.

Charles Grob continued the session with a talk on the implications of Hoasca studies to modern psychiatry, and stressed the need for more studies (and more funding) to establish the safety and inherent value to the individual and community from regular Hoasca use in a religious context. Juan Sanchez-Ramos, M.D., Ph.D. from the University of Miami followed with an excellent presentation of his paper on banisterene (harmaline/harmine) in the treatment of Parkinson's disease during the earlier half of this century (Sanchez-Ramos 1990). This stimulated much discussion and the call for an epidemiological study of UDV members to determine the frequency of this disease in relation to the overall Brazilian population.

After a break, Benny Shanon discussed the phenomenon of cognitive development during Hoasca use, and particularly its impact on language acquisition. Rarely, if ever, have so many Americans successfully managed to become conversant in a single foreign language (Portuguese) for a single purpose (gnosis). Ralph Metzner, Ph.D. professor of psychology, gave the closing lecture for the conference and remarked on how this event represented a remarriage of science and religion, after its formal divorce in the 17th century, and stressed our responsibilities as individuals to cultivate community connections, respect and listen to both women and children, resist oppression wherever it exists and to support indigenous peoples along with other forms of cultural and bio-diversity. I was particularly gratified to see some of the UVD elders, with their simultaneous translation head phones on, quietly nodding with Ralph's message.

#### In Summary

For the reader who was not present at this event, I realize this report may seem overly positive. However, in my personal opinion, I found this to be the most interesting and well organized conference I have ever attended. Through the UDV, we find an excellent example of how a sacred psychoactive substance may be incorporated into everyday reality, and within the existing structures of a modern society. This is certainly not the only way, though the signal comes clear from this southern direction. Let us keep an open eye on this situation, and an open mind to the ways of others. While the legendary telepathic effects of this brew are significant at sufficient doses, I might also suggest a crash course in Portuguese to enhance the experience. *Tem burraqueira?* •

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