RESOLUTION DECLARING THAT THE INVESTIGATION AND ARREST OF INDIVIDUALS INVOLVED WITH THE PERSONAL USE, GROWTH, AND POSSESSION OF ENTHEOGENIC PLANTS, INCLUDING THOSE SCHEDULED AT STATE AND FEDERAL LEVELS, BE THE LOWEST PRIORITY FOR THE CITY OF ANN ARBOR

WHEREAS, Entheogenic Plants, defined herein as the full spectrum of plants, fungi, and natural materials and/or their extracted compounds, limited to those containing the following types of compounds: indole amines, tryptamines, and phenethylamines; that can benefit psychological and physical wellness<sup>2</sup>, support and enhance religious and spiritual practices<sup>17</sup>, and can reestablish human's inalienable and direct relationship to nature; and

WHEREAS, substance abuse, addiction, recidivism, trauma, post-traumatic stress symptoms, chronic depression, severe anxiety, end-of-life anxiety, grief, cluster headaches<sup>9;23</sup>, and other debilitating conditions are present in our community; and

WHEREAS, the use of Entheogenic Plants, which can catalyze profound experiences of personal and spiritual growth<sup>1</sup>, have been shown by scientific and clinical studies and traditional practices to be beneficial to the health and well-being of individuals and communities<sup>17</sup> in addressing these conditions<sup>7</sup>; and

WHEREAS, practices with Entheogenic Plants have long existed and have been considered to be sacred to human cultures and interrelationships with nature for thousands of years<sup>10</sup>; and

WHEREAS, individuals seeking to improve their health and well-being through the use of Entheogenic Plants fear arrest and prosecution due to current legal prohibitions; and

WHEREAS, the City of Ann Arbor currently has many other priorities for the use of its funds, staff, and law enforcement resources; and

WHEREAS, the United Nations considers Entheogenic Plant material used for ritual purposes as excluded from Schedule 1 substances; and

WHEREAS, the Entheogenic Plant practices of certain groups are already explicitly protected in the U.S. under the principle of religious freedom; and

WHEREAS, Entheogenic plants such as Ibogaine have been shown to alleviate treatment resistant cases of opiate and methamphetamine addiction at higher rates than other treatment; and

WHEREAS, Entheogenic Plants or combinations of plants such as Ayahuasca contain Dimethyltryptamine (a naturally occurring compound in the human body) that can be beneficial in treating addiction, depression, and in catalyzing profound experiences of personal and spiritual growth<sup>1</sup>; and

WHEREAS, Entheogenic plants such as cacti that contain phenethylamine compounds (such as mescaline), can be beneficial in the treatment of drug and alcohol addiction and for individual spiritual growth<sup>1</sup>, and have been utilized in sacred initiation and community healing by diverse religious and cultural traditions for millennia and continue to be used for healing and as religious sacraments in modern times<sup>10</sup>; and

WHEREAS, psilocybin, naturally occurring in Entheogenic mushrooms, can alleviate end-of-life anxiety<sup>6</sup> for hospice and terminal cancer patients, can reduce prison recidivism<sup>5</sup>; <sup>21</sup>, can effectively treat substance abuse<sup>4</sup>, depression, and cluster headaches (a Johns Hopkins University study on "healthy-normals," found that Entheogenic plants can occasion mystical-type experiences, which were considered one of the top five most meaningful experiences in a subject's life, and positive lifestyle changes continued in a 14-month follow-up); therefore

BE IT RESOLVED: That the Mayor and City Council hereby declare that it shall be the policy of the City of Ann Arbor that the investigation and arrest of persons for planting, cultivating, purchasing, transporting, distributing, engaging in practices with, or possessing Entheogenic Plants or plant compounds which are on the Federal Schedule 1 list shall be the lowest law enforcement priority for the City of Ann Arbor; and city funds or resources shall not be used in any investigation, detention, arrest, or prosecution arising out of alleged violations of state and federal law regarding the use of Entheogenic Plants; and be it

FURTHER RESOLVED: That this resolution does not authorize or enable any of the following activities: commercial sales or manufacturing of these plants and fungi, possessing or distributing these materials in schools, driving under the influence of these materials, or public disturbance; and be it

FURTHER RESOLVED: That the Mayor and City Council call upon the Washtenaw County District Attorney to cease prosecution of persons involved in the use of Entheogenic Plants or plant-based compounds designated by the federal Controlled Substance Act; and be it

FURTHER RESOLVED: That if any provision of this resolution is declared by a court of competent jurisdiction to be contrary to any statute, regulation, or judicial decision, so that its applicability to any agency, person, or circumstance is held invalid, the validity of the remainder of this resolution and its applicability to any other agency, person, or circumstance shall not be affected.

- 1) Entheogens for Personal and Spiritual Growth
- Frecska, E., et al. (2012). Enhancement of Creative Expression and Entoptic Phenomena as After-Effects of Repeated Ayahuasca Ceremonies. Journal of Psychoactive Drugs 44(3), pp. 191-199.
- Hartogsohn, I. (2018). The Meaning-Enhancing Properties of Psychedelics and Their Mediator Role in Psychedelic Therapy, Spirituality, and Creativity. Frontiers in Neuroscience, 12 (129). doi:10.3389/fnins.2018.00129
- MacLean, K., et al. (2011). Mystical experiences occasioned by the hallucinogen psilocybin lead to increases in the personality domain of openness. Journal of Psychopharmacology, 25(11)1453-1461.
- Moro, L., et al. (2011) Voice of the Psychonauts: Coping, Life Purpose, and Spirituality in Psychedelic Drug Users. Journal of Psychoactive Drugs, 43 (3), pp. 188-198. DOI: 10.1080/02791072.2011.605661
- Nour, M., etal. (2017): Psychedelics, Personality and Political Perspectives. Journal of Psychoactive Drugs. Dol:10.1080/02791072.2017.1312643
- Sweat, N., et al. (2016). The Associations of Naturalistic Classic Psychedelic Use, Mystical Experience, and Creative Problem Solving. Journal of Psychoactive Drugs, 48(5), pp. 344-350, DOI: 10.1080/02791072.2016.1234090
- 2) Entheogens and Psychological Wellness
- Frecska E., et al., (2016). The Therapeutic Potentials of Ayahuasca: Possible Effects against Various Diseases of Civilization. Frontiers in Pharmacology, 7(35). doi: 10.3389/fphar.2016.00035
- McKenna, D. (2004). Clinical investigations of the therapeutic potential of ayahuasca: rationale and regulatory challenges. Pharmacology & Therapeutics 102(2), pp. 111-129.
- dos Santos, R. et al. (2017). Effects of the Natural (3- Carboline Alkaloid Harmine, a Main Constituent of Ayahuasca, in Memory and in the Hippocampus: A Systematic Literature Review of Preclinical Studies. Journal of Psychoactive Drugs, 49(1), pp. 1-10, DOI: 10.1080/02791072.2016.1260189
- Wilcox, J. (2014). Psilocybin and Obsessive-Compulsive Disorder. Journal of Psychoactive Drugs, 46(5), pp. 393-395. DOI: 10.1080/02791072.2014.963754
- 3) Entheogens and Physical Wellness
- Djamshidian, A., et al. (2015). "Banisteriopsis caapi, a Forgotten Potential Therapy for Parkinson's Disease?" Movement Disorders Clinical Practice: n/a-n/a.

- Liu, X., et al., (2017) Harmine is an inflammatory inhibitor through the suppression of NF-kB signaling. Biochemical and Biophysical Research Communications, http://dx.doi.Org/10.1016/j.bbrc.2017.05.126
- Ly et al. (2018). Psychedelics Promote Structural and Functional Neural Plasticity. Cell Reports 23, pp. 3170-3182.
- McCleary, J., et al., (1960). Antibiotic activity of an extract of peyote (Lophophora Williamii). Economic Botany, 14(3), pp. 247-249.
- dos Santos, R. (2014) Immunological Effects of Ayahuasca in Humans. Journal of Psychoactive Drugs, 46 (5), pp. 383-388.
- Samoylenkoa, V., et al. (2010). Banisteriopsis caapi, a unique combination of MAO inhibitory and antioxidative constituents for the activities relevant to neurodegenerative disorders and Parkinson's disease. Journal of Ethnopharmacology, 127 (2), pp. 357-367. doi:10.1016/j.jep.2009.10.030.
- 4) Entheogens and Substance Abuse
- Bogenschutz, M., et al. (2015). Psilocybin-assisted treatment for alcohol dependence: A proof-of-concept study. Journal of Psychopharmacology 29(3), pp. 289-299.
- Bogenschutz, M., and Forcehimes, A. (2017). Development of a Psychotherapeutic Model for Psilocybin-Assisted Treatment of Alcoholism. Journal of Humanistic Psychology, 57(4), pp. 389-414.
- Johnson, M. et al. (2017). An online survey of tobacco smoking cessation associated with naturalistic psychedelic use. Journal of Psychopharmacology 31 (7), pp. 841-850.
- de Veen, B. (2017) Psilocybin for treating substance use disorders? Expert Review of Neurotherapeutics, 17(2), pp. 203-212. DOI: 10.1080/14737175.2016.1220834
- 5) Entheogens and Recidivism
- Romero, S. (March 28, 2015). In Brazil, some inmates get therapy with hallucinogenic tea. The New York Times.
- 6) Entheogens and Anxiety
- Sarris, J., et al. (2013). "Plant-based medicines for anxiety disorders, part 2: a review of clinical studies with supporting preclinical evidence." CNS Drugs 27(4), pp. 301-319.
- 7) Entheogens and Grief
- Gonzalez, D., et al. (2017). Potential Use of Ayahuasca in Grief Therapy. OMEGA— Journal of Death and Dying, pp. 1 -26.

- 8) Ayahuasca and Diabetes
- Wang, P. et al., (2015). A high-throughput chemical screen reveals that harmine- mediated inhibition of DYRK1A increases human pancreatic beta cell replication. Nature Medicine 21, pp. 383-388.
- 9) Entheogens and Cluster Headaches
- Schindler, E., et al. (2015) Indoleamine Hallucinogens in Cluster Headache: Results of the Clusterbusters Medication Use Survey, Journal of Psychoactive Drugs, 47:5 372-381, DOI: 10.1080/02791072.2015.1107664
- 10) Historical Use of Entheogens
- El-Seedi, H., et al. (2005). Prehistoric peyote use: Alkaloid analysis and radiocarbon dating of archaeological specimens of Lophophora from Texas. Journal of Ethnopharmacology 107(1), pp. 238-242.
- Guzman, G. (2008). Hallucinogenic Mushrooms in Mexico: An Overview. Economic Botany, 62(3), pp. 404-412.
- Miller, L. et al., (2019). Chemical evidence for the use of multiple psychotropic plants in , a 1,000-year-old ritual bundle from South America. Proceedings of the National Academy of Sciences. DOI:10.1073/pnas. 190217411
- Samorini, G. (1992). The Oldest Representations Of Hallucinogenic Mushrooms In The World (Sahara Desert, 9000 7000 B.P.). Integration, Journal of Mind-moving Plants and Culture 2/3.
- 11) Iboga/Ibogaine for Addiction Therapy
- Alper, K., et al. (1999). Treatment of acute opioid withdrawal with ibogaine.

  American Journal of Addictions, 8(3), 234-242. doi:10.1080/105504999305848
- Brown, T. K. (2013). Ibogaine in the treatment of substance dependence. Current Drug Abuse Reviews, 6(1), 3-16. doi: 10.2174/15672050113109990001
- Brown, T. and Alper, K. (2017): Treatment of opioid use disorder with ibogaine: detoxification and drug use outcomes. The American Journal of Drug and Alcohol Abuse. DOI: 10.1080/00952990.2017.1320802
- Luciano, D. (1998). Observations on treatment with ibogaine. American Journal of Addictions, 7(1), pp. 89-89. doi:10.1111/j.1521-0391.1998.tb00472.x
- Mash, D., et al. (2001). Ibogaine in the treatment of heroin withdrawal. In K. Alper, & G. A. Cordell (Eds.), The alkaloids: Chemistry and biology (1st ed., Vol. 56, pp. 155—171). London: Academic Press/Elsevier.

- Mash, D., et al., (2018) Ibogaine Detoxification Transitions Opioid and Cocaine Abusers Between Dependence and Abstinence: Clinical Observations and Treatment Outcomes. Frontiers in Pharmacology. 9:529. doi: 10.3389/fphar.2018.00529
- Sheppard, S. G. (1994). A preliminary investigation of ibogaine: Case reports and recommendations for further study. Journal of Substance Abuse Treatment, 77(4), 379-385. doi: 10.1016/0740-5472(94)90049-3
- 12) Ayahuasca Experience similar to Near-Death Experience
- Liester, M. B. (2013). Near-death experiences and ayahuasca-induced experiences- two unique pathways to a phenomenologically similar state of consciousness. Journal of Transpersonal Psychology 45(1), p. 24.
- 13) Ayahuasca for Addiction Therapy
- Barbosa, P. et al. (2018) Assessment of Alcohol and Tobacco Use Disorders Among Religious Users of Ayahuasca. Frontiers in Psychiatry, 9 (136). doi:10.3389/fpsyt.2018.00136
- Brierley, D., and Davidson, C. (2012). Developments in harmine pharmacology Implications for ayahuasca use and drug-dependence treatment. Progress in Neuro- psychopharmacology & Biology 39(2), pp. 263-272.
- Liester, M. and Prickett, J. (2012) Hypotheses Regarding the Mechanisms of Ayahuasca in the Treatment of Addictions. Journal of Psychoactive Drugs, 44 (3), pp. 200-208. DOI: 10.1080/02791072.2012.704590
- Loizaga-Velder, A. and R. Verres (2014). Therapeutic effects of ritual ayahuasca use in the treatment of substance dependence-qualitative results. Journal of Psychoactive Drugs 46(1), pp. 63-72.
- Mabit, J., et al. (1996). Takiwasi: The Use of Amazonian Shamanism to Rehabilitate Drug Addicts. Yearbook of Cross-Cultural Medicine and Psychotherapy. W. Andritzky. Berlin, International Institute of Cross-Cultural Therapy Research.
- Talina, P., and Sanabriab, E. (2017). Ayahuasca's entwined efficacy: An ethnographic study of ritual healing from addiction. International Journal of Drug Policy 44, pp. 23-30.
- Thomas, G., et al. (2013). Ayahuasca-assisted therapy for addiction: results from a preliminary observational study in Canada. Current Drug Abuse Review 6(1), pp. 30-42.
- 14) Ayahuasca and Depression
- Anderson, B. (2012). Ayahuasca as Antidepressant? Psychedelics and Styles of Reasoning in Psychiatry. Anthropology of Consciousness, 23(1), pp. 44-59.

- de L. Osorio, F., et al. (2015). Antidepressant effects of a single dose of ayahuasca in patients with recurrent depression: a preliminary report. Revista Brasileira de Psiquiatria 37(1), pp. 13-20.
- Palhano-Fontes, F., et al. (2014). The Therapeutic Potentials of Ayahuasca in the Treatment of Depression. The Therapeutic Use of Ayahuasca. B. C. Labate and C. Cavnar, Springer: Berlin, Heidelberg, pp. 23-39.
- dos Santos, R., et al. (2016). Anti-depressive, anxiolytic, and anti-addictive effects of ayahuasca, psilocybin and lysergic acid diethylamide (LSD): A systematic review of clinical trials published in the last 25 years. Therapeutic Advances in Psychopharmacology, 6(3), pp. 193-213. doi:10.1177/2045125316638008
- 15) Ayahuasca and Personal Growth
- Bouso, J. C., et al. (2012). "Personality, Psychopathology, Life Attitudes and Neuropsychological Performance among Ritual Users of Ayahuasca: A Longitudinal Study. PLoS ONE 7(8).
- Kuypers, K., et al. (2016). Ayahuasca enhances creative divergent thinking while decreasing conventional convergent thinking. Psychopharmacology. DOI 10.1007/S00213-016-4377-8
- Soler J., et al. (2018). Four Weekly Ayahuasca Sessions Lead to Increases in "Acceptance" Capacities: A Comparison Study With a Standard 8-Week Mindfulness Training Program. Frontiers in Pharmacology, 9 (224). doi: 10.3389/fphar.2018.00224
- 16) Ayahuasca and Spiritual Growth
- Harris, R., and Gurel, L. (2012). A Study of Ayahuasca Use in North America. Journal of Psychoactive Drugs 44(3): 209-215.
- Trichter, S., etal. (2009). Changes in spirituality among ayahuasca ceremony novice participants. Journal of Psychoactive Drugs 41(2), pp. 121-134.
- Tupper, K. (2010). Entheogenic healing: The spiritual effects and therapeutic potential of ceremonial ayahuasca use. The healing power of spirituality: How faith helps humans thrive, Volume 3. J. H. Ellens. Santa Barbara, Praeger: pp. 269-282.
- Tupper, K. W. (2002). Entheogens and Existential Intelligence: The Use of Plant Teachers as Cognitive Tools. Canadian Journal of Education 27(4), pp. 499-516.
- 17) Peyote for treatment of alcohol and drug dependence
- Winkelman, M. (2014). Psychedelics as Medicines for Substance Abuse Rehabilitation: Evaluating Treatments with LSD, Peyote, Ibogaine and Ayahuasca. Current Drug Abuse Reviews 7, pp. 101-116.

- 18) Peyote
- Calabrese, J. (2007). The Therapeutic Use of Peyote in the Native American Church
  Chapter 3 in Vol. 1 of Psychedelic Medicine: New Evidence for Hallucinogens as Treatments.
  Michael J. Winkelman and Thomas B. Roberts (editors). Westport, CT: Praeger/Greenwood.
- Feeney, K. (2007). The Legal Basis for Religious Peyote Use. Chapter 13 in Vol 1 of Psychedelic Medicine: New Evidence for Hallucinogens as Treatments. Michael J. Winkelman and Thomas B. Roberts (editors). Westport, CT: Praeger/Greenwood.
- 19) Psilocybin for End-of-Life Anxiety
- Blinderman, C. (2016). Psycho-existential distress in cancer patients: A return to entheogens. Journal of Psychopharmacology 30 (12), pp. 1205-1206.
- Kelmendi, B., et al. (2016). The role of psychedelics in palliative care reconsidered: A case for psilocybin. Journal of Psychopharmacology 30(12), pp. 1212-1214.
- Ross, S., et al. (2016). Rapid and sustained symptom reduction following psilocybin treatment for anxiety and depression in patients with life-threatening cancer: a randomized controlled trial. Journal of Psychopharmacology, 30(12), pp. 1165-1180.
- 20) Entheogens and Reduced Recidivism
- Hendricks, P., et al. (2014). Hallucinogen use predicts reduced recidivism among substance-involved offenders under community corrections supervision. Journal

- of Psychopharmacology 28(1), pp. 62-66.
- Walsh, Z., etal. (2016). Hallucinogen use and intimate partner violence: Prospective evidence consistent with protective effects among men with histories of problematic substance use. Journal of Psychopharmacology, pp. 1-7. DOI: 10.1177/0269881116642538.
- 21) Psilocybin and Treatment-Resistant Depression
- Hendricks, P., etal. (2015). Psilocybin, psychological distress, and suicidality. Journal of Psychopharmacology, 29(9), pp. 1041-1043.
- Lyons, T. and Carhart-Harris, R. (2018). Increased nature relatedness and decreased authoritarian political views after psilocybin for treatment-resistant depression. Journal of Psychopharmacology, 32(7), pp. 811-819.

## 22) Psilocybin and Cluster Headaches

Schindler, E. et al., (2015) Indoleamine Hallucinogens in Cluster Headache: Results of the Clusterbusters Medication Use Survey, Journal of Psychoactive Drugs, 47(5), pp. 372-381. DOI: 10.1080/02791072.2015.1107664