

AYAHUASCA

Ayahuasca is a psychedelic Amazonian ceremonial decoction or 'liana of the soul' containing *Banisteriopsis caapi* vine having alkaloids that cause monoamine oxidase inhibition. Another typical component is *Psychotria viridis* which contains dimethyltryptamine (DMT). The exact nature of the admixture brew may vary from place to place. Ayahuasca has also moved from shamans to recreational usage. There are both known religious and recreational uses for this herbal brew. It has hallucinogenic effects; the brew can induce out-of-body experiences and alter a person's state of consciousness. These effects stem from ayahuasca's effect on the serotonergic system.

The participation in ayahuasca rituals has been investigated by various authors. Studies specifically looked into the potential use of ayahuasca in cases of treatment-resistant depression, where it showed potential antidepressant

properties.¹⁻³ Different authors proposed other therapeutic uses, such as in mindfulness training,⁴ emotional regulation,⁵ eating disorders⁶ and it has also been hypothesised as potentially useful against traumatic memories⁷ and specific cases of drug dependence.^{8,9} In 2019, Ona et al. boldly reported that the prolonged controlled use of ayahuasca could have a positive effect on the QoL and psychological well-being of users.¹⁰ Another study which included 22 participants and assessed biochemical parameters in the setting of chronic ritualistic ayahuasca use, twice monthly or more for the minimum of one year, did not demonstrate derangements in hepatic function.¹¹ Nonetheless, ayahuasca usage is inherently associated with vomiting, amongst other non-entheogenic reported effects. The vomiting is caused primarily from the effects on area postrema, found in the medulla oblongata, which controls vomiting.

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It is of note that specific drug interactions may result in serious adverse effects; one such example is the serotonin syndrome which arises when ayahuasca is combined with SSRIs.¹²

Although various papers have put forth different uses for ayahuasca, on the other hand biomedical research investigating discriminative learning in zebrafish has shown that prolonged exposure to low concentrations may indeed cause harmful effects to learning and memory processes.¹³ Another concern relates to possible mutagenic effects.¹⁴ Furthermore, rat models have demonstrated foetal developmental toxicity.^{15,16}

These are just some of the documented effects. Further studies into the neuroscience and neurophysiology behind ayahuasca may yield a more precise risk-benefit analysis.¹⁷⁻¹⁹ ❄️

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