Voacanga Africana
by Tengu, Japan; Keeper Trout

Dose: T+ 0:00 7 seeds oral Voacanga africana ground / crushed

Body weight: 0 lbs


Voacanga africana seeds are now available from many sources. In animal experiments, the ibogaine-like compounds found in relatives of Tabernanthe iboga have shown properties similar to ibogaine—the chemical responsible for T. iboga’s stimulant and visionary properties (Ott 1993 citing Bert et al. 1988; Zetler et al. 1968). In addition to V. africana seeds, JLF has had, as of October 1997, added Tabernaemontana sananho: 90 grams of roots for $50.00, or 120 grams of stems for $40.00. This plant is also mentioned as having chemical constituents similar to T. iboga (Ott 1993). It would be nice to know how many grams is effective at what level, and also what amount might cause one to take a permanent vacation.

L.E.R. sells a hundred V. africana seeds for $35.00 (about 7-8 grams), and JLF sells thirty grams for $25.00. I purchased L.E.R.’s seeds, and have eaten seven seeds, crushed into a powder, and swallowed in a single gel-cap. After two hours or so, remarkably noticeable effects began, which reminded me of mescaline, with a +2.5 on the Shulgin Scale. I was going to eat fifteen seeds, and I am glad that I didn’t, because I was barely prepared for what happened from only seven seeds. I saw swirling patterns, while lightly floating in a fuzzy sphere about me. My peripheral vision was dramatically increased. My body felt numb at times, and my limbs were tingling. My mind kept drifting or transcending off on deep daydreams, which would close off with a snap and I’d be back in my chair, startled at how far away my dreams seemed to have taken me. Regarding V. africana, the defunct . . . of the jungle catalog stated: ‘Although the rootbark is employed in folk medicine as a stimulant and heart strengthener, the seeds themselves are reserved for visionary use among the elders.’ The Botanical Preservation Corps sells V. africana plant- extract in one ounce bottles for $22.00 with the statement, ‘The indigenous healers who collect this material for us prefer Voacanga to the other more famous African sacred plant ally.’

In a prior experiment, one half a bottle of their tincture produced an interesting, non-nauseating +1, with little or no visuals. I dare not take a large amount of seeds for fear of experiencing the terrifying tales told in an excellent summary of T. iboga and ibogaine in the Psychedelics Encyclopedia, where bioassays enabled dreamers to soar as birds above intricately detailed cities, meet dead relatives who warn them to return, and have other disturbing visions (Stafford 1992). People also experienced extreme nausea and some African Bwiti cult members in Gabon have died from ingesting T. iboga root in large quantities (Fernandez 1972). TIIKAL notes that an ibogaine
dose requires from hundreds of milligrams to up to a gram or more. While it does not mention *V. africana* by name, it does mention that many plants contain iboga-type alkaloids; in particular *V. schweinfurthii* var. *puberula* contains ten alkaloids. The major one being tabersonine, is present in the seeds ‘at a rather remarkable 3.5%.’ Ibogaine is also present in the root-bark as a minor constituent, at a concentration of 0.02% (Shulgin & Shulgin 1997).

This leads me to find L.E.R.’s *V. africana* seeds as a major legal entheogen source, which is far easier to prepare than ayahuasca, with as few as seven crushed seeds fitting easily into a single gelatin capsule! – Tengu, Japan

*K. Trout responds:*

Yes, there are several alkaloids in most *Voacanga* species and in a few *Tabernaemontana* species that are ‘similar’ to ibogaine. These include: ibogaline, ibogamine, iboxygaine, isovoacangine, tabernanthine, voacangine, and voacristine. Any and all evaluation of these compounds used lab animals and apparently none have seen a proper pharmacological evaluation in humans. As far as I can presently determine, these are suspected—not proven—to have an action similar to ibogaine. It should be noted that most workers were comparing them with the stimulant properties of ibogaine rather than its visionary effects.

The experience reported by Tengu does not resemble what others have reported from low doses of ibogaine. Despite this, the experience certainly sounds interesting and worth looking into. This also needs further evaluation as doses of what is presently being sold as *Tabernanthe iboga* on the streets were reported by friends to show powerful effects at much lower than expected doses. The actual identity of this material needs to be confirmed, as the active doses were less than half what is generally given as a normal entry level dose of *T. iboga*.

Two of the *Voacanga africana* alkaloids—voacamine and voacorine—have been reported as cardiac stimulants; the first stimulating the heart muscles but not slowing the rhythm, and the second resembling digitalis in its action on the heart. Both, however, are reported as being far less toxic than digitalis (Quevauviller & Blanpin 1957). Despite similar reports by others, apparently this activity has failed to be demonstrated reliably (Fish et al. 1960).

Voacangine, (ibogaine with a carbomethoxy group added), has been said to show only weak CNS stimulating properties (Taylor 1965 citing Zetler & Unna 1959) or psychoactive effects like *T. iboga* (Ott 1993 citing Zetler 1968). R.C. Rathbun at Lilly Research Laboratories found them to have different pharmacological activity with voacangine lacking the stimulant properties of ibogaine (Gorman et al. 1960). Voacangine can be converted to ibogaine chemically (see Percheron et al. 1957).

While *Voacanga* alkaloids have been considered to be fairly nontoxic and rapidly eliminated (Vogel & Uebel 1961; Taylor 1965), it should be stressed that many of the *Tabernaemontana* species contain a multitude of alkaloids, not just the desired compound(s). Psychonauts interested in experimenting with *Tabernaemontana* species should review their alkaloid pharmacology, distribution and ethnopharmacological uses. In the few cases when seeds were analyzed, there were considerable differences from the stems or roots, and often significant differences between the stem
and roots themselves (see Van Beek et al. 1984).

Death from the Voacanga and Tabernaemontana alkaloids appears to be due to respiratory paralysis. Symptoms after being given lethal doses via intraperitoneal injection include paralysis of skeletal muscles, irregular breathing, cyanosis, asphyxia, tremor, clonic convulsions, coma and death within 8-25 minutes (Taesotikul et al. 1989).

While no Tabernaemontana species is regarded as extremely toxic by native users, caution and common sense should be used in exploring this area. Respiratory depression, following the initial stimulation, temporary leucopenia (abnormally low white blood cell count) and abnormally low blood pressure are among the negative side-effects reported in animals studies.

One apparently common after-effect that has been reported by the handful of people I know of who have tried Voacanga and Tabernaemontana species is mild incontinence ('urinary dribbling'). While fairly minor—not lasting for more than a couple of days—and obviously not life threatening, this is an annoying side-effect that has caused myself and those few others I know with experience in this area to limit, or in some cases even abandon, bioassays. For more on the activity and toxicity of the alkaloids present in these species, see Table 1. [not included]

The Tabernaemontana sananho extracts I have sampled to date have been limited to two different preparations of ‘tsicta.’ Both have produced a state of sharpened awareness but no type of visionary effects beyond slight after-images, at the levels sampled. The two preparations were distinctly different from each other in taste, strength and appearance. One (the better of the two) was turbid (claimed to have been produced by a native healer), while the other was produced by Soxhlet extraction, almost clear and contained excessive amounts of ethanol. The maximum amount of either that was ingested was half a bottle.

I have smoked Voacanga africana seeds several times but thus far have only evaluated them up to the six seed level. So far, there has been no visionary effects beyond mild tracers behind moving objects and slightly defined colored contours around images at the highest level sampled.

However, to generate a ball-park feel for this, let’s assume, for argument’s sake, that the seeds somehow tested out at a whopping 5% for ibogaine or whatever. If 100 seeds weighed 7-8 grams (lets call it 7.5 grams) then each seed would be around 75 mg. Multiply this by seven seeds and we have 525 mg of material. Times 5% and we have a maximum of 26.25 mg of ibogaine or whatever per seven seeds. As we do not know what is actually in these seeds, it should be clear that if said seeds are as potent as described, either the seeds would have to contain in excess of 14% ibogaine or whatever (extremely unlikely) or else an active entheogenic alkaloid that was many times stronger than ibogaine, just to produce threshold effects by ingesting seven of them. Remember, virtually all of these estimations are far stronger than will be encountered in reality and most reported effective dosages are much higher than the 75 mg of ibogaine we used to calculate the threshold level. The dosage for ibogaine is considered by some to be 3 mg per kg (Usdin & Efron 1979).

I have not been able to obtain any work on the alkaloid content of the seeds other than the mention of tabersonine (Oliver-Bever 1967, 1982, 1983, 1986). Tabersonine has been described as a mild hypotensive with a quarter the activity of reserpine (Van Beek et al. 1984 citing Zetler 1963).
Regarding Tengu’s comments (citing Shulgin & Shulgin 1997) on *Voacanga schweinfurthii* var. *puberula* containing 3.5% tabersonine. This is quite a high value (3.5 grams per 100 grams of seeds) but I have no idea what activity this alkaloid has besides lowering the blood pressure. The 0.02% ibogaine represents 20 mg per 100 grams of root-bark. It is worth noting that one botanist, Schumann, has described *Voacanga africana* as *Voacanga schweinfurthii* var. *parviflora* Schum.

While overall of similar chemistry, substantial variations exist not only between different species of *Voacanga* and different parts of a given plant but also within a single species when examined by different researchers. Whether this reflects variability between individual populations, or whether it is a result of the ease that ibogaine and similar compounds auto-oxidize into related compounds during extraction and purification efforts, is not apparent from the published accounts (see Thomas & Biemann 1968).

Major alkaloids reported from *Voacanga africana* stem-bark include: voacamine (7.2%), voacangine (5.6%), voacristine (4.0%), voacorine (3.7%), and vobasine (1.6%) (Thomas & Biemann 1968). Percentages are of the total alkaloids present; total crude alkaloid content was 0.2% by weight. Other researchers have found total crude alkaloid contents of stem-bark as high as 3.5% (Janot & Goutarel 1955).

The best way to determine the appropriate dosage would be to start slow and use a series of bioassays with gradually increasing amounts until the desired level was determined. I have heard of no one doing this for either *T. sananho* stem or roots yet. As they show no cumulative poisoning and are apparently fairly non-toxic at therapeutic levels, there does not appear to be any serious risks posed by cautious bioassays.

*In an attempt to get to the bottom of this first hand, our intrepid technical editor K. Trout determined that a bioassay was in order. It should be noted that the seeds he used were three years old, and not obtained from L.E.R.*

16 June 1998: I took seven seeds of *Voacanga africana* and ground them as finely as a mortar and pestle would allow. They weighed almost exactly 1/2 a gram. They were smaller and their shape was different than *T. iboga* but the appearance and surface textures were very similar. They had a strong pleasant smell that reminded me of something I could not put my finger on. Almost like a *Ligusticum* root. My mental state was alert but tired and recovering from being a bit overheated from high temperatures outdoors during the first half of the day.

3:36 pm: Threw the powder on my tongue and found the same taste. Not at all unpleasant; not particularly bitter. Mild anesthetic feeling in lips and palate beginning within two minutes fading by 3:45 pm.

3:45 pm: I am becoming more aware of my heart beat; it seems to be increasing but not racing. Whether this pharmacological or from anticipation I do not know. There seems to be some perceptual enhancement.

3:46 pm: A feeling of tension is beginning around my eyes similar to LSD or mushrooms. There is tension at base of skull, and I’m growing slightly tired.
3:51 pm: Pulse felt fine and strong, going at a steady normal rate until I realized that it was almost exactly 120 bpm. (I later realized that I was in error reading my pulse, and that it never reached 120 bpm. I was in an altered enough state that I wasn’t aware of this mis-perception during the bioassay.)

3:56 pm: Simple tasks seem difficult. My mind seems clear. I laid down till 4:06 pm:. I’m now at almost +1. Mild tracers are present. Tension in brow. Heavy limbs.

4:31 pm: Situation unchanged. Mild perceptual disturbances, especially if I am moving or I am looking at something moving, but nothing more intense developed. My mind is clear but movement and temporal judgment is somewhat impeded.

4:48 pm: More stimulated, but no more intense visually.

6:48 pm: After a light reverie-filled less-than-sleep it is still the same. After this point I was distracted by other things and did not follow the remainder of the course.

Effects were pretty much the same as experienced with tsicta or smoking *V. africana* seeds. While no overt visionary action was noted, there were promising hints that suggested that a higher level should be evaluated. I plan to repeat the experiment with 15 seeds at some point, but I suspect that an even higher level will be required. (Once I get more seeds, I plan 30, 60, 90, and 120 as intervals for evaluation.)

If Tengu’s report of the activity of L.E.R.’s seeds is confirmed it would be quite interesting, but the first question needs to be what is causing these effects at this dosage range.