Kava- Kava/ Anxiety

(Piper Methysticum)

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Brief Summary

- member of the black pepper family
- comes in many forms: root, powder, extract, pills, tea
- still plays a crucial role in Fijian, Samoan, and Tongan societies where a kava drink is consumed to honor guests and establish social identity
- generally, only the root is used because the leaves of the plant are known to be toxic to the liver

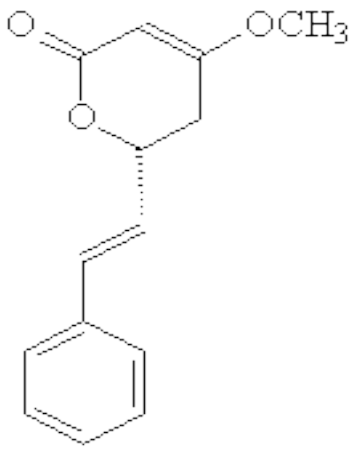
Metabolism and bioavailability

- average dose is 200 to 250 mg of an extract standardized for around 25% kavalactones
- The total daily dosage should not exceed 300 mg of kavalactones

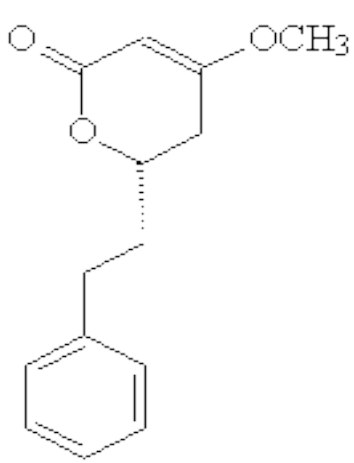
Kavalactones aka kavapyrones :

•Kawain and dihydrokawain are lipid soluble compounds and are permeable to the blood-brain barrier. These substances modulate the function of various transmitter receptor systems and modify certain voltage-sensitive ion channels.
•Kavapyrones have local anesthetic properties, which cause a harmless tingling and numbness of the tongue and oral mucosa.
•These compounds also possess anticonvulsant, muscle-relaxing and sedative effects in experiments with animals.

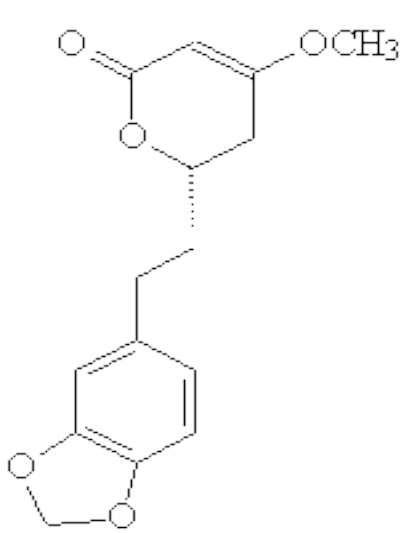
Kawain



Dihydrokawain



Dihydromethysticin



The Kava Anxiety Depression Spectrum Study (KADSS): a randomized, placebo-controlled crossover trial using an aqueous extract of *Piper methysticum*

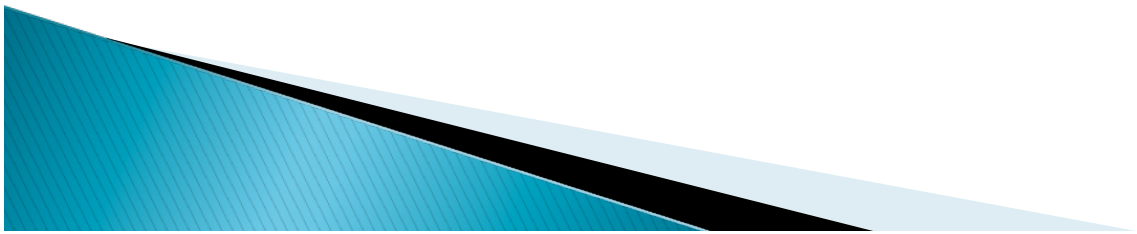
Sarris J, Kavanagh DJ, Byrne G, Bone KM, Adams J, Deed G.

- **Abstract**
- **RATIONALE:** Piper methysticum (Kava) has been withdrawn in European, British, and Canadian markets due to concerns over hepatotoxic reactions. The WHO recently recommended research into "aqueous" extracts of Kava.
- **OBJECTIVE:** The objective of this study was to conduct the first documented human clinical trial assessing the anxiolytic and antidepressant efficacy of an aqueous extract of Kava.
- **DESIGN AND PARTICIPANTS:** The Kava Anxiety Depression Spectrum Study was a 3-week placebo-controlled, double-blind crossover trial that recruited 60 adult participants with 1 month or more of elevated generalized anxiety. Five Kava tablets per day were prescribed containing 250 mg of kavalactones/day.
- **RESULTS:** The aqueous extract of Kava reduced participants' Hamilton Anxiety Scale score in the first controlled phase by -9.9 (CI = 7.1, 12.7) vs. -0.8 (CI = -2.7, 4.3) for placebo and in the second controlled phase by -10.3 (CI = 5.8, 14.7) vs. +3.3 (CI = -6.8, 0.2). The pooled effect of Kava vs. placebo across phases was highly significant ($p < 0.0001$), with a substantial effect size ($d = 2.24$, eta(2)(p)). Pooled analyses also revealed highly significant relative reductions in Beck Anxiety Inventory and Montgomery-Asberg Depression Rating Scale scores. The aqueous extract was found to be safe, with no serious adverse effects and no clinical hepatotoxicity.
- **CONCLUSIONS:** The aqueous Kava preparation produced significant anxiolytic and antidepressant activity and raised no safety concerns at the dose and duration studied. Kava appears equally effective in cases where anxiety is accompanied by depression. This should encourage further study and consideration of globally reintroducing aqueous rootstock extracts of Kava for the management of anxiety.

St. John's wort and Kava in treating major depressive disorder with comorbid anxiety: a randomized double-blind placebo-controlled pilot trial.

Sarris J, Kavanagh DJ, Deed G, Bone KM.

- **Abstract**
- **OBJECTIVE:** We report the first randomized controlled trial (RCT) using a combination of St. John's wort (SJW) and Kava for the treatment of major depressive disorder (MDD) with comorbid anxiety.
- **METHODS:** Twenty-eight adults with MDD and co-occurring anxiety were recruited for a double-blind RCT. After a placebo run-in of 2 weeks, the trial had a crossover design testing SJW and Kava against placebo over two controlled phases, each of 4 weeks. The primary analyses used intention-to-treat and completer analyses.
- **RESULTS:** On both intention-to-treat ($p = 0.047$) and completer analyses ($p = 0.003$), SJW and Kava gave a significantly greater reduction in self-reported depression on the Beck Depression Inventory (BDI-II) over placebo in the first controlled phase. However, in the crossover phase, a replication of those effects in the delayed medication group did not occur. Nor were there significant effects on anxiety or quality of life.
- **CONCLUSION:** There was some evidence of antidepressant effects using SJW and Kava in a small sample with comorbid anxiety. Possible explanations for the absence of anxiolysis may include a potential interaction with SJW, the presence of depression, or an inadequate dose of Kava.



ACTIVITY!!!

Media and Marketing Claims

- Relieves stress and anxiety without the unwanted side effects of sedation, addiction, and impairment of alertness
- muscle relaxation and calmed nerves
- Enhanced mental awareness, alertness, acuity, concentration
- Provide a restful night sleep to insomniacs
- Relieves headaches (particularly tension headaches)