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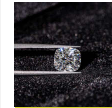
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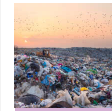
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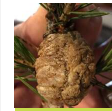
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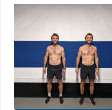
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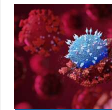
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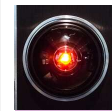
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Morning Glory Has A Hell Of A Psychedelic Story

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IMAGE CREDIT: BASICO/SHUTTERSTOCK.COM

Seeds from the morning glory (*Convolvulaceae*) family of plants contain LSD-like chemicals, which have the potential for treating everything from depression to Parkinson's disease, at least if studies are allowed.

Morning glories are tropical vines with flowers that only open in the morning. They thrive in disturbed forests and at river edges. More importantly, they form symbiotic relationships with highly specialized fungi of the *Periglandula* genus, and mother plants pass their fungus on through the seeds. The fungi in question are known to sometimes produce ergot alkaloids, a family of molecules that produce psychedelic effects in humans. Indigenous Mexicans have long [taken advantage](#) of this property and some of the molecules responsible, which were [identified](#) in 1960.

[Professor Keith Clay](#) of Tulane University decided to explore how widespread and diverse these molecules are. In [Communications Biology](#), Clay and coauthors report 53 of the 210 species they tested had ergot-containing seeds, mostly in species where this had not previously been reported. However, sweet potatoes, the most famous morning glories ([this one](#) aside), showed no ergot alkaloid presence.

"The symbiosis and ergot alkaloids are specific to particular branches of the morning glory evolutionary tree, and each branch contains different ergot alkaloids and alkaloid mixtures," Clay said in a [statement](#). That makes the morning glory family collectively represent a cornucopia of biologically active molecules to study.



By Stephen Luntz

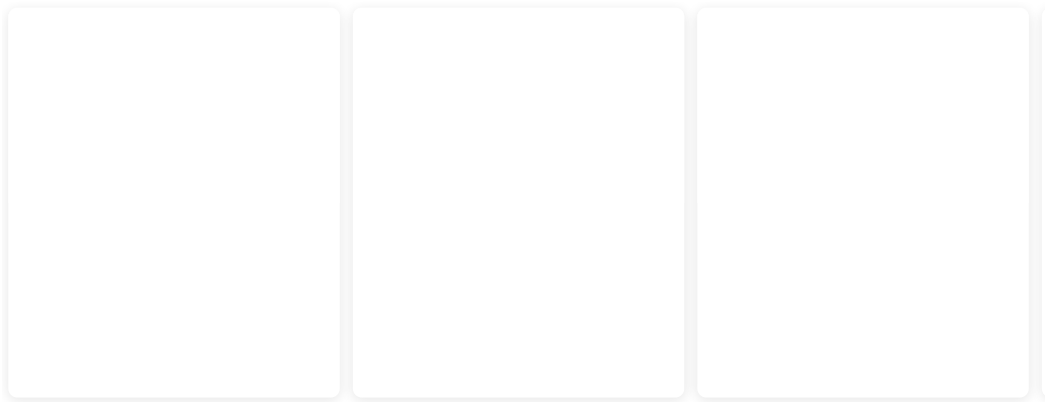
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For decades research into the effects of psychedelic drugs has been made nearly impossible by government restrictions. It remains extremely difficult, but the obstacles are being [slowly loosened](#), and the findings are remarkable. [Multiple studies](#) have [suggested](#) that, taken the right way, ergot derivatives can have beneficial effects not only for depression but for conditions such as [Parkinson's disease](#).

Since each version of the alkaloid molecules will show subtly, and sometimes dramatically, different effects, an abundance of natural examples offers researchers a better chance of finding those that match particular needs and have few side-effects.

"Our study is the first to show how highly coevolved morning glories and their symbiotic fungi are, and that coevolution is manifested by different mixtures and concentrations of ergot alkaloids across the morning glory evolutionary tree," Clay said. It is thought the molecules protect the seeds against those who would eat them – presumably indicating that beetles, which represent their greatest threat, are not keen on seeing god.

Seed mass was found to correlate with alkaloid concentration, although IFLScience would like to remind anyone inspired by this information that going in search of one's own, untested wild psychedelics is dangerous. Still, it's probably safer than the drugs with which "morning glory" is more [frequently associated](#).



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Luke · 12 hours ago



Interesting read.

An acquaintance of mine, about 15 years ago, did up a batch of morning glory seeds in the oven.. Not sure the recipe or the genus, but he was out of his mind for days and when he came back to reality he was not the same person anymore.

Nice guy, and forever changed. it took him a lo...[See more](#)

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