

Provenance for *Squamellaria kajewskii*

Seeds of this species became available early in 2014. We got ours on 3/17/2014 and sowed them that day. We ended up with 4 mature plants from those seeds. They started to flower in 2016 and the plant you received today is a seedling from hand pollination of two of those plants (lineage: JV2014-1 x JV2014-2)¹. The original seeds were harvested at about 1000 meters above sea level along the road going up to the Panguna Mine in central Bougainville. This is the Kieta District and the mountain range is the Crown Prince Range. The Island of Bougainville is the main island in the Autonomous Region of Bougainville of Papua New Guinea. (There is currently a political movement towards independence for Bougainville from PNG.)

The species was originally published as *Hydnophytum kajewskii*. At that time (and even earlier in Odoardo Beccari's work *Malesia II* in 1885) the illustrations and some of the text in the description got mixed up with that of *Hydnophytum guppyanum*. Some of those errors persist to this day in the paperwork of these two species so information must be screened carefully. A discussion and references to these mistakes can be found in the *Squamellaria* section of this forum: <http://myrmecodia.invisionzone.com>

Both *Hydnophytum kajewskii* and *guppyanum* were transferred into the genus *Squamellaria* on March 30, 2016 based on DNA sequencing²

Squamellaria kajewskii is an unusual species and quite different than other Rubiaceae ant-plants. There is no association with ants. The internal chambers of the caudex are very large and mostly filled with water. Roaches are the main inhabitants. The internal chambers are shaped like the slices of bread in a loaf of bread and each chamber has two entry holes – one at each side on the top. The caudex is scaphoid shape. (see photos)

I knew I had to get this species into cultivation when I heard from Bougainville natives that when the wind blows just right in the forest the tubers “whistle” – like blowing across a bottle partially filled with pop! In the native language (Nasioi) *S. kajewskii* is known as Na'are. It is used as “a herbal medicine for pig's growth”.

¹ We decided to maintain notes on lineage because we suspect these 4 plants are the only ones that made it into the USA.

² *Evolutionary Relationships and Biogeography of the Ant-Epiphytic Genus Squamellaria (Rubiaceae: Psychotriaceae) and Their Taxonomic Implications* by Guillaume Chomicki & Susanne S. Renner that was e-published and is available online at:
<http://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0151317>



Hydnohydnophytum kajewskii drawing from the works of Drs. Camilla Huxley and Matthew Jebb



A herbarium sheet showing slices cut from the caudex of a *S. kajewskii* to demonstrate the unusual internal chamber structure



Top view of a small plant of *S. kajewskii* in a Korean garden potted incorrectly. They grow as epiphytes sideways off the tree.



Habitat photo of *S. kajewskii* by Derrick Rowe showing typical growing position.

The plant you received today was grown from a seed sown on March 7, 2016. A few months later I planted it in a wood slat basket that was hanging from one of its sides. The former top of the basket was covered with a piece of tree fern and the seedling was planted thru a hole in the tree fern. The basket is packed with an open epiphyte mix of long-fiber sphagnum pieces, perlite, clay balls, charcoal and coconut husk chunks.

Hanging the basket this way has the plant growing in the same situation as it does on the trees – perpendicular to the trunk. I have not experimented with planting them permanently in an upright position in a pot – I really want to hear them whistle!!!

While the plants grow quickly and some flower at just 2 years old they have been slow to form the openings to the chambers. No sign of those yet on the 4th birthday of our oldest plants.



Above is a photo of the plant I am sending you in a 6" basket.



Photo of an older plant in an 8 inch basket.