

ICEERS Notes about Iboga Cultivation

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1. Introduction

This document is a compilation of the information about cultivation of plants in the iboga family posted in the ibogasustainability@iceers.org mailing list by different subscribers. It will be updated periodically as new information is included and discussed in the mailing list.

If you want to contribute to future versions of this document, or simply want to know more about the initiative, please see the the Appendix for list and contact information.

2. Seeds and Germination

As frequently happens with tropical plant species, iboga seeds are recalcitrant. This means they lose their viability quickly, they are not resistant to cold and they cannot be dried and stored for a long period of time. Dried seeds lose viability in a matter of weeks. Germination attempts using dried seeds from internet vendors are, as far as we know, not successful.

However, fresh seeds put into soil can sometimes germinate many months (up to 18, but rarely more than 12) after planting.

In Gabon, drying seeds, sending them, then planting them immediately is known as a viable way to spread iboga seeds.

Rotting fruit also encourages germination. Several sources report that the highest germination rates are obtained when planting whole fresh seed pods. High germination rates

have also been obtained by letting the seedpod rot for a month, and then separating each seed before sowing without letting the seeds dry.

An experienced internet vendor, Shaman Australis, describes their procedure to send seeds:

We wrap the fresh pods in live moss at time of harvest. This slows down the rotting of the fruit and allows us to get the fruit to all countries in time. The seeds will usually germinate inside the rotting fruit. Indeed, we recommend to open the package carefully, and if the seed has not germinated to seal it back up or transfer it to fresh sphagnum moss. This is the most reliable method of germinating the seeds we have found in the 15+ years we have been working with this species.

One thing that seems to trigger bursts of germination is to cycle the planted seeds wet/dry. This does not seem to help if the seed was planted with rotting pod, in which case germination is much more uniform and quick.

Growers mention the taproot should be clearly visible before transplanting a seed to its own pot, whether seeds are started in a germination tray, a container or the seed pod itself.

3. Propagation by cuttings

Iboga can also be reproduced through cuttings. Heat is required for cuttings to grow roots, but excessive wetness is not. Like many latex containing Apocynaceae species, high humidity increases rotting of cuttings. Growers in the tropics and subtropics find the dry part of summer to be the best time for propagating iboga by cuttings.

4. Growing Environment

Iboga thrives naturally in environments with warm temperatures above 20 degrees Celsius, high ambient humidity and partial shade.

The plant will survive for at least a few months in low humidity, but it may slow down and stop growing. Lack of humidity is countered by production of smaller leaves or complete loss of leaves with little detriment to the plant, but for sustained growth, humidity chambers may be necessary in drier climates.

Cold is the biggest problem for iboga. Temperatures below 8 °C for two or three weeks in a row,

or a couple nights at 4 °C, will most likely kill the plants - although sometimes the roots survive and reshoot when temperatures raise.

If the environment is humid enough, iboga is well tolerant to some direct sunlight, although new leaves will be smaller. Shaded spots, or areas that often have cloud cover, will produce faster growth. A cultivator reports that

In Gabon, I was shown 2 same age plants side by side, one in full sun, and one under a much larger tree, demonstrating the shaded plant was about twice the size of the other. My indoor plants get fairly low light, but I do notice a healthy growthspurt when I leave them outside on a warm sunny day. I hypothesize this is either because they are responding to fresh air or the full spectrum sunlight, because the coatings on the window they are in front of throttle the sunlight spectrum.

For an iboga plant to have a good chance of adapting successfully to a new environment, it needs some development. This suggests at least a year of age under ideal conditions, which means that the stem needs to have developed some woodiness.

5. Soil and Nutrients

In Gabon, the iboga plant grows in an orange, sandy clay soil that dries very quickly. A growing substrate with good draining and easy root aeration is very important. This is particularly true in the case of seeds and seedlings, more vulnerable to molds appearing in damp, thick soils.

Cultivators frequently report using mixes based principally on sphagnum moss, perlite, coarse sand, coconut coir or other light substrates like pine bark. Any mix that grants good drainage and air flow can work well.

Iboga does not need to root deeply. Rather than putting a lot of effort in improving the soils, in Gabonese gardens the plant is fertilized by raking leaves to the base, creating a lot of mulch for decomposition. Iboga will leech the nutrients and will improve the underlying clay via worms and root aeration.

6. Flowering and Pollination

Iboga is a long day plant - in its natural cycle, it flowers when hours of light increase.

The plant can be self-pollinated in order to produce viable seed, according to this report from Shaman Australis cultivators:

When we first started, we selected our most vigorous seedling for cutting propagation at a different location. Eventually the cuttings flowered and 2 years later started producing pods and seeds. It was only then that we introduced another seedling to the area. As we were the first to grow this plant in this country, we know there were no other plants that could have pollinated the first seedling.

7. Indoor Cultivation

There's many reports of cultivators who have grown iboga in indoor setups.

I have a very low power indoor grow setup that uses natural light from a south facing window. During the winter the setup takes 40-60 watts and requires a bimonthly cleaning as the only maintenance. Typical indoor room temperatures (10C-25C) support the habitat nicely and the waste heat from the system serves to heat the house. Basically it consists of a set of steel wire shelves enclosed by insulating bubble wrap on the top and bottom and a shower curtain around the sides, CPU fans for circulation, and a few seedling heat mats. It could be improved with a humidity sensor and spray valves, but I find it needs very little attention after getting familiar with it. With 1 meter wide x 0.4 meter deep x 2 meter high shelves I find I can grow about 20 plants to the 2 year old stage before feeling pressure to expand.

Iboga happily takes 24h light and will grow accordingly. Long days will make the species flower continuously under lights. Also Iboga loves hydroponics, and will tolerate quite low light conditions, so can be grown on margins of other indoor crops.

Appendix: About the ICEERS Iboga Sustainability Mailing List

1. INTRODUCTION

This is a private list only accessible to subscribers invited by ICEERS. To request a subscription or to cancel an active subscription, you can contact the list moderator at jmvilaseca@iceers.org.

The objective of the list is to discuss and share relevant information for the agricultural sustainability of the iboga plant family, in response to the growing pressure against the species in its African native habitat. The discussion should be based on technical aspects of iboga cultivation, and it aims to put together a useful framework for growing projects or organizations involved in the preservation and propagation of the iboga plant species.

The aspects to discuss include, but may not be limited to:

- Methods of propagation by seeds, cuttings or tissue culture
- Adaptability and response of the iboga plant to different environments (light, latitude, temperature, humidity...)
- Cultivation in indoor setups and greenhouses
- Growth control, pollination and advanced cultivation techniques

The information compiled in this list can be used by ICEERS for the publication of open reference articles that may facilitate any initiatives for the sustainability of iboga.

2. HOW TO USE THE LIST

In order to post a message to the list, send the email to the List Address, ibogasustainability@iceers.org. Your message will be distributed to all the active subscribers.

If you click reply to a message, the reply is automatically sent to this list address and will be sent to all the other subscribers. You can also send a private email to the email address of the sender, that will also be visible.

You can share your experience and knowledge related to the list topics, and reply to the list addressing contents posted by other list members. When sending an email with a certain topic, please write the topic that best describes your message in the subject. In general we recommend keeping the length of the emails to the minimum needed, in order to avoid excess repetition and to keep contents more readable and manageable.

If possible, avoid posting information through links to internet sites. You can leave relevant links if you want, but the information should be in the body of the posted message for easier reference.

3. LEGAL TERMS

The information shared on this list is for informational use only, and is not intended to promote any illegal activity. The knowledge base generated at this list can be used for facilitating cultivation and other sustainability projects in countries where iboga is legal or unregulated. ICEERS specifically disclaims any liability, loss, injury, or damage incurred as a consequence, directly or indirectly, of the use and application of any of the contents of this list. Please do not use this list for illegal business or the organization of activities involving countries where iboga or ibogaine is controlled. All the information you share can be sent anonymously if you wish, with only your email as visible contact info.

For any doubts or technical inquiries, you can send an email to the moderator at jmvilaseca@iceers.org.