MICRODOSE BROS.

Presents:

Cultivating Hawaiians (Panaeolus cyanescens) from Liquid Culture or Sporeprints

Part 1

Hawaiian

Grow Guide

LIQUID CULTURE & SPOREPRINT

*Hawaiian, also known as Copelandia, is **Panaeolus cyanescens**: a tropical species and a different mushroom from the classic cubensis strains. It loves warmth, grows naturally on dung in humid pastures, and produces many small, slender mushrooms with pale caps and jet-black spores.*

This guide takes you from inoculating sterile grain with your Hawaiian liquid culture to harvesting multiple flushes. Starting from a Hawaiian sporeprint? Part 3 shows you how to grow a clean culture on agar first. Hawaiian is a little less forgiving than cubensis, so it's a rewarding project for growers who already know the basics.

Supplies needed*:

Sterile Workspace
- 70% Isopropyl Alcohol
- Disposable Gloves
- Face Mask (Recommended)
- Clean Work Surface
- Still Air Box or Flow Hood (Recommended)

Inoculation
- Hawaiian Liquid Culture or Sporeprint
- Agar Plates and Scalpel (Sporeprint only)
- Sterile Syringe and Needle
- Alcohol Wipes
- Lighter or Alcohol Lamp

Grain Spawn

(Skip if using pre-sterilised grain bags)
- Rye, Millet or Wild Bird Seed
- Large Cooking Pot and Colander
- Mason Jars or Filter Patch Grain Bags
- Pressure Cooker or Autoclave

Manure-Based Bulk Substrate

(Skip if using a pre-pasteurised manure substrate)
- Well-Aged, Dried Horse Manure
- 1 Brick of Coco Coir (approx. 650 g)
- Coarse Vermiculite
- Agricultural Gypsum (Optional)
- Large Pot, Oven Bags or Bucket
- Thermometer for Pasteurising

Fruiting Equipment
- Monotub or Filter Patch Grow Bag
- Fine Mist Spray Bottle
- Thermometer and Hygrometer
- Heat Mat (Recommended for Hawaiian)
- Indirect Light or 6500K LED

MICRODOSE BROS.

Presents:

Cultivating Hawaiians (Panaeolus cyanescens) from Liquid Culture or Sporeprints

Part 2

Before You Begin

Hawaiian grows differently from cubensis. Three things matter most: **warmth** (24–28 °C), a **manure-based substrate** instead of plain coco coir, and **patience**, because the mushrooms are small and delicate.

Not to be confused with: Psilocybe cyanescens, the "wavy cap", a different species that grows on wood in cooler climates.

Important Tips for Success

Work Clean: most problems are caused by contamination. Disinfect everything and keep sterile materials covered.

Keep It Warm: Hawaiian likes 24–28 °C. Cooler temperatures slow it down a lot. Stay below 30 °C, where contamination risk rises.

Be Gentle: the mushrooms and their stems are thin and fragile. Handle your grow as little as possible.

1 Prepare a Sterile Workspace

Action: Clean and disinfect your work area with 70% isopropyl alcohol. Wash your hands thoroughly, put on clean gloves and lay out all your equipment before opening anything sterile.

Explanation: A clean workspace greatly reduces the chance of contamination and gives your mycelium the best start.

2 Prepare Your Grain Spawn

Action: Rinse rye, millet or wild bird seed, then soak and simmer it until hydrated. Drain well, fill your jars or filter patch bags, and sterilise at 121 °C (250 °F) in a pressure cooker for 90 minutes. Let it cool completely.

Explanation: Grain feeds your mycelium. Proper hydration and full sterilisation create the ideal conditions for clean colonisation.

Note: Pre-sterilised grain bags let you skip this step. Always check they are sealed and undamaged.

MICRODOSE BROS.

Presents:

Cultivating Hawaiians (Panaeolus cyanescens) from Liquid Culture or Sporeprints

Part 3

Starting from a Hawaiian Sporeprint?

Spores first need to germinate before you can grow them on grain. Use these steps to grow a clean culture on agar, then follow the rest of the guide from Step 4. Using a liquid culture? Skip this part and go straight to Step 3.

A Prepare Your Agar Plates

Action: Start with sterile Petri dishes containing agar, either home-made and pressure-sterilised or bought ready-made. Only open them in a still air box or in front of a flow hood.

Explanation: Spores need a clean, nutritious surface to germinate on. Agar lets you see exactly what is growing, so contamination is easy to spot.

B Add the Spores

Action: Flame-sterilise a scalpel or inoculation loop, let it cool, and gently scrape a tiny amount of spores from the print. Touch them onto the agar in a few spots and close the dish straight away.

Explanation: A tiny amount is plenty: each sporeprint holds millions of spores.

C Incubate and Isolate

Action: Seal the dishes and keep them dark at 24–28 °C (75–82 °F). When white mycelium appears, cut a small piece (about 6 x 6 mm) from the healthiest, fastest-growing edge with a sterile scalpel and move it to a fresh plate.

Explanation: Repeating this transfer leaves contamination and weak growth behind, until you have one clean, vigorous Hawaiian culture.

Note: Germination can take from several days to two weeks. Most growers need 1 to 3 transfers.

D Inoculate Your Grain

Action: Once a plate is clean and evenly colonised, cut it into small wedges and drop 1–2 wedges into each jar or grain bag of sterilised grain. Then continue with Step 4 of this guide.

Explanation: An agar wedge does the same job as liquid culture: it starts your grain colonising from a clean, living source.

MICRODOSE BROS.

Presents:

Cultivating Hawaiians (Panaeolus cyanescens) from Liquid Culture or Sporeprints

Part 4



3 Inoculate the Grain

Action: Shake the ampoule gently. Flame-sterilise the needle, wipe the injection port with alcohol, and inject 1–2 ml per jar or 2–5 ml per grain bag. Seal it immediately.

Explanation: The liquid culture is living Hawaiian mycelium, so the grain starts colonising from the injection points straight away.

4 Incubate the Grain Spawn

Action: Keep the jars or bags somewhere dark at 24–28 °C (75–82 °F) until the grain is completely covered in white mycelium. A heat mat helps keep the temperature stable.

Explanation: Warmth is key for this tropical species. At the right temperature, the mycelium colonises steadily and outcompetes contaminants.

Note: Usually 2 to 4 weeks. Once the grain is about 30% white, a gentle shake helps it colonise faster.



5 Prepare the Manure-Based Substrate



Action: Mix roughly 2 parts rehydrated, well-aged horse manure with 1 part coco coir and 1 part coarse vermiculite, plus a handful of gypsum (optional). Pasteurise the mix at 65–75 °C (150–170 °F) for 1 to 2 hours, then let it cool completely.

Explanation: In nature, Hawaiian grows on dung. A manure-based substrate gives it the nutrients it prefers, while pasteurisation removes competitors and keeps helpful microbes.

Note: Pre-pasteurised manure-based substrate bags are a simpler alternative.

6 Check Field Capacity

Action: Squeeze a handful of substrate firmly. It should release only a few drops of water. If water streams out it is too wet; if nothing comes out, add a little water and mix again.

Explanation: The right moisture balance lets the mycelium colonise quickly and reduces the risk of bacterial contamination.



MICRODOSE BROS.

Presents:

Cultivating Hawaiians (Panaeolus cyanescens) from Liquid Culture or Sporeprints

Part 5



7 Spawn to Bulk

Action: Break up the fully colonised grain and mix it evenly with the cooled substrate at about 1 part spawn to 2 parts substrate. Fill your monotub or grow bag to an even depth of 5–8 cm (2–3 inches) and lightly level the surface.

Explanation: Even mixing helps the mycelium spread quickly through the manure. An even, shallow layer suits Hawaiian's small fruits and keeps moisture consistent.

8 Colonise the Substrate

Action: Keep the tub or bag closed, dark and warm at 24–28 °C (75–82 °F) until the surface is covered in white mycelium.

Explanation: The mycelium builds a dense network that stores the water and nutrients needed for fruiting. Full colonisation is essential before you change conditions.

Note: Usually 10 to 21 days. Avoid opening the container during this stage.



9 Introduce Fruiting Conditions



Action: Once fully colonised, increase fresh air exchange, keep humidity at 90–95%, and give 12 hours of indirect light or 6500K LED followed by 12 hours of darkness. Keep it warm at 24–28 °C and mist only when the fine droplets on the surface start to disappear.

Explanation: Fresh air, high humidity, light and warmth together signal the mycelium to start forming pins.

MICRODOSE BROS.

Presents:

Cultivating Hawaiians (Panaeolus cyanescens) from Liquid Culture or Sporeprints

Part 6

10 Monitor Growth



Action: Check your grow daily. Keep it warm and humid with steady fresh air, and keep the surface lightly covered in tiny droplets without letting it get waterlogged.

Explanation: Pins usually appear within 7 to 14 days. Hawaiian forms many small, slender mushrooms rather than a few large ones. Healthy mycelium stays bright white. Green, black, grey or pink patches, slimy spots or a sour smell are signs of contamination.

Note: Growing times are estimates. Temperature, humidity, fresh air and technique all affect how fast your mushrooms develop.

11 Harvest the First Flush

Action: Harvest when the caps open from a bell shape and before they flatten and drop their black spores. Gently twist each mushroom at the base or cut it with a clean, sharp blade.



Explanation: Hawaiian has no veil under the cap, so watch the caps instead. Harvesting before the black spores drop keeps your grow clean. Blue bruising where you touch or cut is normal.

Note: The stems are thin and fragile, so handle them with care.

12 Prepare for Additional Flushes



Action: Remove any leftover stems or debris, return the grow to fruiting conditions and lightly mist the surface if it looks dry.

Explanation: Healthy Hawaiian blocks can produce several flushes. A clean surface and stable conditions help the mycelium recover.

Note: Most growers harvest 2 to 4 flushes, with the next one appearing after about 1–2 weeks.

MICRODOSE BROS.

Presents:

Cultivating Hawaiians (Panaeolus cyanescens) from Liquid Culture or Sporeprints

Part 7



13 Enjoy the Process

Congratulations on growing your own Hawaiians! Every grow teaches you something new, and with each cycle you'll get better at reading your mycelium, fine-tuning warmth and humidity, and producing consistent harvests.

Need help along the way? Send our team a message on WhatsApp with a photo and we'll help you work out what's going on.

LEAVE A REVIEW!

HOW TO DRY?

We'd love to hear about your grow. Please consider leaving a review to help us improve and reach more growers.

Want to dry your harvest? Check out our drying guide!

**This guide is for educational purposes and describes one common way to grow Panaeolus cyanescens; other methods exist. Growing times are estimates. Laws on mushroom cultivation differ by country, so check the rules where you live. For adults aged 18+ only.*

