MAKE YOUR OWN SEED PAPER

Paper is one of those things that's easy to recycle. Did you know you can make new paper out of old paper without throwing it in the recycle bin? Your new paper will be biodegradable, and because we'll add seeds to it, you'll even be able to plant it in the ground and watch new life sprout when you're done using it.

Materials

• Blender (stick/immersion blender or electric blender you won't be using for food again)



- Paper (from paper shredder, magazine pages, scrap paper, <u>not</u> construction paper)
- Sponges, rags, washcloths, or large felt pieces
- Water

- Cookie sheet (optional)
- Small indigenous seeds
- Metal clothes hangers (that you're able to bend)
- Nylon stockings/pantyhose (I pair per 2-4 frames)

*If you don't have metal hangers, you can use a wooden picture frame instead, with the picture and glass removed

Preparation

Step 1: Make your paper slurry

Unless your paper is already shredded, tear or cut the paper into small pieces and put them in the blender. A few handfuls of ripped paper will do.



If you're planning to use an immersion blender, place the paper into a bowl instead.

Pour water into the blender (or bowl) until the paper is slightly covered. Allow the paper to soak for a few hours or overnight.



Step 2: Forage for seeds

When looking for seeds for your paper, you can either choose to look in your backyard or visit public land. If going on public land, you must request a permit. For more information on this, visit <u>https://dlnr.hawaii.gov/forestry/frs/permitting/forest-reserve-system-</u> <u>collection-permit/</u>. Wherever you go, make sure to only forage for native flora that is indigenous to the island and not invasive species. When the paper we're making gets planted, we want it to cultivate native trees and shrubs to help heal our 'āina and provide a habitat to our native wildlife. Your paper will be making an impact!

Which seeds are safe choices?

These native plants are all good choices as they grow on most Hawaiian islands.



'A'ali'i

Good accent plant or hedge



'Ūlei Good plant for

topiaries



Good ground cover plant

'Uki



Good container plant

'Uki'uki



Māmaki Good shade

plant

Once you find a plant you want to pick from, make sure it's healthy and pick the berry or flowering part of the plant. Only gather what you need and don't pick more than 1/3 of the plant. When you return from foraging, spread the blooms/pods/seeded parts you gathered on a table and carefully pick out the seeds.

Step 3: Make sieve

Have an adult help you bend the wire hanger into a square- or rectangle-like shape. Stretch the nylon over the frame to make a sieve. Tie a knot in the nylon at one end, then pull the other end taught and tie another knot at the opposite end. Place a towel (rag, felt, or sponge) down on your cookie sheet then place your sieve on top of it.

Step 4: Blend paper pulp

With the help of an adult, run the blender containing your torn paper and water on a low speed. Run the blender a little bit faster until the mixture is a nice, smooth pulp. Or, if you're using an immersion/stick blender, submerge it in the paper and water solution (in the bowl) and turn it on to blend into a pulp.



Note: Running the blender with too little water may burn out the blender motor. If the blender seems to be struggling at all, add more water. You can't have too much water.

Step 5: Form paper

Scoop out some pulp from the blender or bowl with your hand, squeezing out excess water. Carefully mash the squeezed out pulp on your sieve. Try to make the pulp covering as thin and uniform as possible. Place a towel on top and gently press to absorb extra water.



Step 6: Peel off sieve

Slowly peel your sieve off the paper. If the paper begins to rip and stick to the it, place it back down and re-pat it with the towel, rag, or sponge, using a dribble of water to help separate the paper from the mesh sieve.

Step 7: Add seeds and final touches

Gently press your seeds one at a time into the paper pulp, spacing them out so they're evenly scattered over the surface. Let the "new" paper dry. Cover the paper with a towel and iron on low if you want it to be smoother. Let the paper continue to dry overnight, and it should be ready to use in the morning.

Use your new seed paper as you would regular paper! You can write, paint, or draw on it.

Ideas for how to use your seed paper:

- homemade cards
 - wrapping paper
 - Christmas ornaments
 - paper garlands
- bookmarks
- origami
- collage

- gift tagsartwork
- paper gananus



Planting your paper

When you're done using your seed paper, don't forget to plant it! Tear it into pieces and place them on top of some soil and water them regularly. Soon they will germinate and begin sprouting seedlings. Eventually the bits of paper surrounding the seeds will decompose and leave the seedlings to grow into mature plants.

Be sure to check out other resources at: https://www.ksbe.edu/digital/holomoana/



Send us a photo or video of your seed paper for a chance to be featured on the Holomoana website! Email it to ittraining@ksbe.edu.

This activity has been adapted from one developed by the Hawai'i Division of Forestry and Wildlife.

