Mulching
for Moisture, Weed Control
and Soil Protection
USDA NRCS Practice (484)

What is mulch?
Mulches are usually plant materials like chopped leaves, small branches, coconut husks, grass clippings and wood chips placed in a thick layer on the soil surface. Other mulching materials common on Pacific Island farms include coconut fronds and husks, old coconut mats, banana leaves, breadfruit leaves, betel nut wastes, forest tree leaves, cardboard and chipped typhoon debris.

Why use mulch?
Pacific Island farmers can benefit from using mulch on their farm. Using this practice can:
• protect the soil surface and help stop raindrop erosion.
• feed crops and increase the crop yield.
• add organic matter to the soil.
• protect soil around new plantings.
• smother weeds.
• hold moisture in the soil.

To learn more about protecting your farmland from water damage, read Protecting Soil on Pacific Island Farms.
Where and when is mulching used?
- Between rows in crops
- Under fruit and other trees
- In areas with heavy foot or machine traffic
- In heavily shaded areas where vegetation will not grow well
- On soils that don’t allow water to soak into the ground
- Throughout the growing season, and especially when crops are still small and getting started
- Between growing seasons when fields are left unplanted

Compost, a special kind of mulch
Composted waste (like grass, shrub and tree trimmings, leaves, and fruits) release plant nutrients as they decompose. Animal manures can be mixed with them to provide more nutrients. To compost, make a light, fluffy mixture of plant and animal waste and arrange it in piles, rows, or bins. Turn the pile from time to time and allow the mixture to cure for a few weeks. The finished, earthy material can be used on your crops. Your local Cooperative Extension Service can provide more information on composting.
## Common Mulch Materials for Pacific Island Farms

<table>
<thead>
<tr>
<th>Material</th>
<th>Layer/Depth</th>
<th>Life Span of Material</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chipper wastes</td>
<td>3 to 4 inches</td>
<td>6 months</td>
<td>Chipped debris (bark/leaves)</td>
</tr>
<tr>
<td>Compost</td>
<td>3 to 4 inches</td>
<td>6 to 8 months</td>
<td>Best used as soil conditioner</td>
</tr>
<tr>
<td>Lawn clippings, cut grasses or weeds</td>
<td>1 to 2 inches</td>
<td>1 to 3 months</td>
<td>Don’t bring weed seed or weeds into your field</td>
</tr>
<tr>
<td>Newspaper</td>
<td>3 to 6 sheets</td>
<td>2 to 6 months</td>
<td>Avoid glossy paper, color prints</td>
</tr>
<tr>
<td>Woven weed barrier</td>
<td>1 layer</td>
<td>3 to 5 years</td>
<td>Check product label</td>
</tr>
<tr>
<td>Plastic film</td>
<td>1 layer</td>
<td>10 to 36 months</td>
<td>Check product label for lifespan</td>
</tr>
<tr>
<td>Wood chips</td>
<td>3 to 4 inches</td>
<td>6 to 9 months</td>
<td>Wood chips can take nitrogen from the crops</td>
</tr>
</tbody>
</table>
For current lists of suggested mulching materials suitable for your farm, contact the local office of the Cooperative Extension Service or the local USDA NRCS field office.

For the best results, combine **mulching** with other conservation practices:

- **Residue Management** (329): leaving slash in the field for soil protection
- **Heavy Use Area Protection** (561): reinforcing high traffic areas on the farm
- **Composting Facility** (317): a facility to produce compost from organic byproducts

Additional information is available from your local USDA Service Center or at [www.pb.nrcs.usda.gov](http://www.pb.nrcs.usda.gov) and [www.hi.nrcs.usda.gov](http://www.hi.nrcs.usda.gov).

**Mulch works well for soil cover in heavily shaded areas under trees. To prevent trunk rot, don’t pile mulch directly against the base of the trees.**