

Mark Acosta, Extension Associate; L. Robert Barber, Extension Agricultural Economist

What is Living Mulch?

- Can be a natural cover developed by frequent mowing, or can be a planned planting like sweet potato or perennial peanut or other cover crops.
- Also known as a conservation cover or a permanent cover crop.
- Living mulch is a crop grown to suppress weeds and protect topsoil. It is a low-growing plant that spreads quickly to form a dense cover. You can plant them in permanent strips on sloping land to prevent erosion or between tree rows in orchards.



Sweet Potato grown in a multi-species fruit tree orchard

The following are benefits that living mulch provides to plants and soils:

- Suppresses the growth of weeds.
- Protects topsoil. Living mulch protects the soil surface from raindrops. They help to slow rainwater down. The roots of cover crops hold soil particles in place.
- Loosen and improve the soil, allowing more water to soak in and be conserved.
- Fertilize the cash crop to increase the harvest if a nitrogen fixing cover crop (perennial peanut) is used.
- Prevents trunk damage from bush cutters. Limits weeds near plant so there is no need to cut close to cash crop.

Disadvantages:

- Can provide a habitat for pests and disease.
- Can compete for water and nutrients.

Where and when living mulch is used?

- Between rows in crops.
- Under fruit and other trees.
- In fields with heavy infestations plant diseases and pests such as nematodes.
- Early in the growing season when trees are small and filling in.
- Between growing seasons when fields are left unplanted.

Plan for your living mulch:

To get good growth for both your crop and your living mulch:

- Pick a living mulch that will not compete with your cash crop for water and fertilizer.
- Be sure your cover crop won't shade out your cash crop.
- Be sure the cover crop won't attract insects and diseases that will attack your cash crop.
- Don't use living mulches that can escape from the farm and become problem weeds in natural areas or forests.

Selecting living mulch:

Selection of suitable living mulch depends on the area where it will be grown. Some living mulches prefer partial shade; others thrive in deep shade or full sun; and a few grow well in either shade or sun. Some living mulches prefer moist soil, while others need dry or well drained soil.

Living mulch species listing:

- Sweet potato (excellent for northern Guam)
- Cowpea
- Perennial peanut (does not do well in northern Guam)
- Squash sp.

For current lists of suggested living mulch species for your farm, contact your local Cooperative Extension Service at 735-2080.