

## 13. Cover Cropping

**C**over cropping is *Fundamental #7*. It is the technique of growing plants that protect the soil to conserve topsoil and moisture. It can be considered a living mulch. Under sowing legumes below existing crops and other companion plants will work well. You get all the advantages of mulching; soil conservation, moisture retention, increased microbial activity, etc., but in addition the canopy which covers and protects the soil is living and dynamic.

Camote or sweet potato, Kang Kong and perennial peanuts cover the topsoil and hold it in place while stopping raindrops from compacting soil. We also use alugbati, or Malabar spinach, to slow run off so that it can penetrate deep down. This may eventually be used as

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forage, grazed, harvested, composted or used as a green fertilizer. Be sure to pull back the cover crop when starting seedlings. Most plants will compete for nutrients and the established canopy usually wins. The perennial peanut grows right up to our papaya trunk without inhibiting it. However, corn, we have found, needs more space around the seeded area to establish itself.



**To maximize the power of cover cropping, we had to learn to use legumes such as alfalfa, hairy vetch, clovers and peanut vines. They will add value to the overall system. These are good pioneer crops; we plant them when we are establishing new soil.**

Legumes fix nitrogen and increase the fertility of soil. The leaves are high in nitrogen and valuable as feed and fertilizer. All kinds of cover crops have been used, sometimes as a free standing crop, other times under sown to protect soil as the main crop gets established. Cover crops are part of the overall solution to soil management. Minimal tillage is a key to natural soil management. It will be explored later.



Never leave your soil exposed to sun and rain erosion for long periods of time. Even grasses grown as a pasture are a good cover. The manure will enrich the soil and the grass will add fertility while boosting bacterial growth. The roots from grasses usually do not survive the plowing process if EM is sprayed before turning it under. It ferments the roots and creates fertilizer before the grass sprouts again!



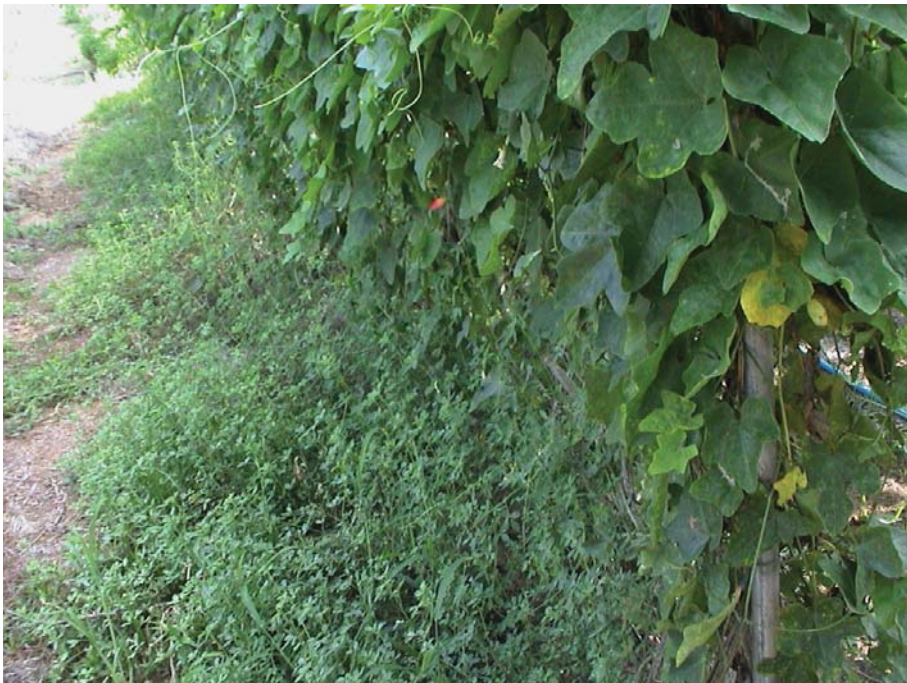
Cover crops and vines crawl over the soil and prevent weeds from getting established.

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**Soybeans and alfalfa are under sown to cover our topsoil.**





**Alugbati is Malabar spinach. This is a great crop if you rotate it. It crowds out weeds and preserves moisture and soil. It does well as a cover crop because it blankets the ground. I like it because the goats and pigs enjoy it so much. It reduces our feed costs as a “cut and carry” forage crop.**

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After the first plowing, the beds are mixed with composts, rice hulls, charcoal and green fertilizers. Then mulch is used to cover the new beds. We never plow again.