



Better together

Mixes of green manure do a better job than each kind of green manure on its own.

Green manure, ground cover or so-called ‘catch crops’ are crops that farmers plant between the main crop harvests to improve the soil. These interim crops absorb nitrogen so that it doesn’t leach away during a downpour, enrich the soil or provide protection against parasitic nematodes.

But should you use a single green manure crop or is a mix better? Previous Wage-

Mixes with
vetch reduce
nitrate leaching

ningen research showed that plants grow better if you grow different species next to one another. That applies to green manure crops too, shows a

study by Rima Porre with combinations of oats, vetch and Chinese radish.

According to Porre, farmers often use Chinese radish and oats because they grow fast. That rapid growth means they take up relatively large amounts of nitrogen, which stops nitrate leaching into the soil. Vetch fixes nitrogen but does not grow so fast. The risk of leaching is therefore greater.

Growth

But mixes that include vetch *are* effective in preventing nitrate leaching, says Porre, who recently obtained a doctorate for this research. ‘The nitrogen losses during growth were just as low for the mixes as for radish alone or oats alone.’ However, contrary to expectations, the mixes did not lead to more growth. Porre’s research shows that the mixes do perform well though in terms of carbon sequestration in the soil. RK