

THE FORAGER

Agronomics with livestock in mind!

A-B-C's of Cover Crops (2)...

(This is a continuation from the May 2011 issue)

Other cover crops are grown to suppress insects, disease and weeds, or to attract beneficial insects. In addition to nitrogen from legumes, cover crops help recycle other nutrients: potassium, calcium, phosphorous, magnesium and sulfur, to name the most common. Buckwheat, for instance, is neither a legume nor grass but is a fast-growing summer cover crop that is excellent for nutrient recycling (e.g. phosphorus, honeybees and allelopathy -- plants that inhibit or slow the growth of other nearby plants by releasing natural toxins or "allelochemicals.")

Uses:

Cover crops can be planted in the alleyways between rows in orchards, vineyards, Christmas trees, berries, windbreaks and field nursery trees to control erosion and provide traction. They can be used to fill a niche in crop rotations, to improve the conditions of the soil or to prepare land for a perennial crop. Legumes may be grown as summer green-manure crops to add nitrogen along with organic matter. Non-legumes such as ProMax[®] sudangrass and buckwheat are grown to provide biomass, smother weeds and improve soil tilth.

Cover crops that are planted and established after the harvest of a main crop are used primarily to reduce nutrient leaching from the soil. For example, planting Groundhog Radish following corn harvest helps scavenge residual nitrogen, reducing the possibility of ground water contamination and functioning as a winter cover crop.

If the desire is to also provide a forage crop, short rotation forage crops can function as both cover crops when they occupy the land for pasture or hay and as green-manure when they are eventually incorporated or killed for a no-till mulch. Examples of this application include legume planting of alfalfa, sweet clover, trefoil, red clover and white clover, as well as grass-legume crops like fescue-clover pastures. For maximum soil-improving benefits, the forage should not be grazed or cut for hay during its last growth period, to allow time for biomass to accumulate prior to killing. Forage legumes are valuable in rotations because they generate income from grazing or haying and still contribute nitrogen from re-growth and root residues.

Vegetation Management to Create Cover Crop Mulch:

Herbicides are the most commonly used tools for cover crop suppression in conservation tillage systems. Non-chemical methods include propane flammers, mowing, planned winter kill and mechanical tillage.

(Edited from an article by AMPAC Seed Company)



Alfalfa



Groundhog Radish



Groundhog Radish & Oats

SEED – AGRONOMY – NUTRONOMY

Contact our Agronomy Office for Information & Support

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The chart below suggests cover crops that can be utilized for a specific purpose and several, such as Groundhog-brand Radish, ProMax® BMR Hybrid Sudangrass, Pasja and Appin Turnips have multiple attributes for soil improvement and enhancement.

COVER CROPS FOR A SPECIFIC PURPOSE

SPECIFIC PURPOSE:	ProMax® Sudangrass	GroundHog Radish	Turnips: Pasja/Appin Purple Top	Teff	Buckwheat	Winter Peas	Cereal Rye	Annual Ryegrass: Common BRUISER	Oats	Clover: Crimson, Red/White Sweet	Hairy Vetch
Organic matter	X						X	X	X		
Nitrogen fixation						X				X	X
Recapture excess N/P	X	X	X		X	X	X	X	X	X	X
Requires NO herbicide to kill		X	X			X			X		
Reduce compaction	X	X	X					X			
Quick forage/grazed	X	X	X	X			X	X	X		
Droughty soils				X	X						
Hay crop	X			X			X		X		
Weed control / Disease suppression		X			X		X				
Start-up or enhance no till		X	X								
Prevent Soil erosion					X	X	X	X	X		
Natural herbicide	X	X			X		X	X	X		
Attracts beneficial insects					X					X	
Tolerate wet soils							X	X	X	X	
Tolerate heat / drought	X			X	X					X	X
Cold tolerant						X	X			X	
Nurse crops							X		X		
Best for broadcasting		X	X				X	X		X	
Low cost to establish	X	X					X		X	X	
Requires little management		X	X						X		
Most winter hardy							X	BRUISER			X
Requires high management							X	X			X
Susceptible to or attracts pests and/or disease							X	X	X		X

