



## Establishment of Oilseed Radish in Sugarbeet Rotations

*In sugarbeet growing areas, oilseed radish should be established in early August, using only varieties that are a sugarbeet cyst nematode trap crop.*

August has been an excellent time to establish oilseed seed radish in Michigan. In the Saginaw Valley, radish is commonly planted after wheat harvest or after machine harvested pickles. Optimum planting date is generally the first two weeks of August. Best stand establishment and growth has occurred when planted into worked wheat stubble with about 80-90 pounds of nitrogen. Excellent results have occurred following pickles with little or no applied nitrogen. Seeding rates range from 10-20 pounds per acre. When planted as a nematode trap crop the higher seeding rate of 20 pounds per acre is recommended.

Variety selection is absolutely critical when oilseed radish is used in the sugarbeet growing region in Michigan. Two basic types of radish exist—one is called a tillage radish and the other is specially developed as a sugarbeet cyst nematode trap crop. The tillage radish root will grow larger and nematodes will reproduce on these varieties. The trap crop variety's roots will be smaller and when planted stimulate nematodes to hatch. Sugarbeet cyst nematodes will then attach to the root and either will die or not reproduce from lack of nutrition. Research conducted by Michigan State University Extension has shown Sugarbeet cyst nematode reproduction on tillage radish was as great as or greater than a susceptible sugarbeet variety.

Oilseed radish trap crop varieties that are currently recommended for the sugarbeet growing area include: Defender, BioFume, Image, Colonel and Adagio. Tillage type radishes that should be avoided in the sugarbeet production areas will include: Soilbuster, Groundhog, Graza, Driller, Daikon, Tillage and Pile Driver. New varieties are being released all the time, so it is important to know which varieties are tillage types and which are trap crops.

Be aware, both types of oilseed radish can produce similar results when it comes to soil or environmental benefits. Both types are excellent as nitrogen catch crops. Some livestock producers will plant radish after manure application to minimize nitrate leaching. Radish roots grow very deeply and will break up compacted soils and increase water infiltration. Up to four tons of green manure or bio-mass can be produced which will increase organic matter and can

suppress weeds. Either variety type should be mowed or incorporated into the soil prior to seed development, normally at or before flowering.



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