

Also known as cultivated radish, radish, oilseed radish, forage radish. Radishes are commonly used in cover crop mixtures and sometimes as monocultures. If planted early, quick growth can help suppress fall-emerging weeds. As a good nitrogen scavenger, Daikon radish is used in fields with high residual nitrogen. With little competition, roots can get very large and present planting problems. Seed set can be a problem with late planted cash crops like cotton because these flower early and don't reliably winterkill in the Piedmont.

Recommended Varieties

Variety	Reasons Why	Source
'Common' VNS	Available. Produces large fleshy root.	
Defender oilseed radish	More branched root and more top growth.	Jimmy Carter Plant Materials Center data
Sod Buster	Produces large fleshy root. Claims high level of glucosinolate which can suppress nematode populations.	Petcher Seeds
Eco-till Soil Buster	Produces large fleshy root.	
Smart Radish, Nitro Radish, Graza Radish, Nematode Radish	Nitro is a standard oil seed radish, Smart has more branch roots and more top growth, Graza has less root and more forage, Nematode claims high level of glucosinolates.	Green Cover Seed

Planting Information

Information	Comments	Source
Drilled Seed Depth (inches)	¼ - ¾	Should be planted in September. Can plant in August.
Drilled Seeding Rate (lbs/acre)	8 - 13	Higher seeding rate may increase competition and decrease root size.
Broadcast Seeding Rate (lbs/acre)	8 - 20	Lower seeding rates (6-8 lbs/acre) are recommended in LA.
Aerial Seeding Rate (lbs/acre)	N/A	

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Termination Information

Information	Source
<p>Daikon Radish should winter kill after two consecutive nights of temperatures below ~20 °C. Winterkill may not be reliable in the Piedmont. Brassicas can be terminated by herbicides, mowing after flowering, heavy grazing, and tillage. They need to be killed before full bloom to prevent seed set. Full rate of paraquat (0.75 lb ai/acre), multiple applications of glyphosate, or glyphosate plus 1 pt/acre 2,4-D may be needed to terminate.</p> <p>Consult your local Extension and state Pest Management Handbook for herbicide recommendations. Always follow the herbicide label.</p>	<p>GA and VA county agent – personal communications, Managing Cover Crops Profitably</p>

Cultural Traits

Traits	Comments	Source
<p>Typical Dry Matter Range (lbs/acre)</p> <p>4,000 - 7,000</p>		Managing Cover Crops Profitably
<p>Typical Total N Range (lbs/acre)</p> <p>50 - 100</p>	<p>N is released very quickly, usually within a month and can be lost to leaching if other plants are not actively growing.</p>	Managing Cover Crops Profitably, Radishes – A New Cover Crop for Organic Farming Systems
<p>Life Cycle</p> <p>Cool season annual broadleaf</p>		Managing Cover Crops Profitably
<p>Growth Habit</p> <p>Upright</p>		Managing Cover Crops Profitably
<p>Preferred Soil pH</p> <p>6.0 - 7.5</p>		Managing Cover Crops Profitably
<p>Relative Seed Cost (\$/acre)</p> <p>\$\$</p>		Based on survey of seed costs using maximum price and max seeding rate
<p>Min. Germination Temp (F)</p> <p>45°</p>		Managing Cover Crops Profitably
<p>Cautions</p>	<p>Radish roots can get as large as 4 inches in diameter if there is residual nitrogen in the soil, little competition from other plants, and late termination (late spring). The roots will decompose quickly after termination, but can cause planters to bounce if decomposition has not occurred. Produces a slight odor during decomposition. Since Daikon radish is a host for bacterial soft rot which is induced under warm temperatures, do not plant in hemp production systems. Radishes should also be avoided if canola is in the cash crop rotation</p>	<p>Farmer – personal communications</p> <p>Clemson University</p>

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Sources:

Gruver, J., R.R. Weil, C. White, Y. Lawley. 2017. Radishes – A New Cover Crop for Organic Farming Systems. eXtension. Organic Agriculture.

Jimmy Carter Plant Materials Center Annual Reports:

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/ga/plantsanimals/?cid=nrcs144p2_022076

Managing Cover Crops Profitably: <https://www.sare.org/Learning-Center/Books>

USDA Oilseed Radish Plant Guide: https://plants.usda.gov/factsheet/pdf/fs_rasa2.pdf