



Kohlrabi

Dr. Joe Masabni
 Department of Horticulture
 Texas AgriLife Extension Service

Varieties

Early Purple Vienna, Early White Vienna, Grand Duke, Kolibri, Purple Danube, Winner

Soil Preferences

Fertile, well-drained, medium textured soils, pH range of 5.5 - 7.5; relatively well adapted to heavy soils, but poorly adapted to light sands.

Optimum Growing Conditions

Cool days (60-70°F) with cool to cold nights (40-50°F). Will tolerate wide temperature fluctuations and warm temperature.

Establishment Methods

Planting Method	Direct seeded or transplanted
Optimum Time	Spring - soil seed zone temperature >50°F Fall - soil seed zone temperature < 90°F
Seeding rate	3-5 lbs/acre
Approx seed/oz	9,000
Seeding depth	0.25"
Seedling spacing	3-6" in-row, 12" between rows on 40" wide raised beds

Fertility/Fertilization

Rates presented as actual lbs/acre N₂, P₂O₅, and K₂O (base actual rates applied on soil test results).

Generalized rate: 150 - 75 - 80 lb/acre*	
N*	100-130 pre-plant; 25-30 lbs N/acre side-dressed at thinning (4 true-leaf stage), or at transplanting
P**	60-80 banded approx 2" below seed at planting
K	80-100 (Potassium not normally required in most areas of Texas)

* Ammonium nitrate is very stable and least likely to evaporate. Urea and ammonium sulfate evaporate if not incorporated. ** Use high phosphate starter solution on transplants (5 lbs 5-20-10, etc./100 gal water - 8 oz/plant).

Water/Irrigation

High water demand (15-20"). Uniform moisture levels required throughout growing season for optimum yields.

Pest Management

Kohlrabi Diseases and Common Name of Fungicidal Controls

DISEASE	FUNGICIDE*	OMRI LISTED FUNGICIDE**
Black rot	Acibenzolar-S-Methyl, Copper Sulfate	<i>Bacillus subtilis</i>
Downy mildew	Acibenzolar-S-Methyl, Azoxystrobin, Chlorothalonil, Copper Sulfate, Dimethomorph, Fenamidone, Fluopicolide, Fosetyl-Al, Mandpropamid, Maneb, Mefenoxam, Potassium Phosphite, Pyraclostrobin	<i>Bacillus pumilus</i> , Extract of <i>Reynoutria sachalinensis</i> , Hydrogen Dioxide, Neem Oil, Potassium Bicarbonate, <i>Streptomyces lydicus</i>
Nematode	1,3-Dichloropropene, Chloropicrin, Metam-Potassium, Metam-Sodium, Sesame Oil	Azadirachtin

Kohlrabi Insect Pests and Common Name of Insecticidal Controls

INSECT	INSECTICIDE*	OMRI LISTED INSECTICIDE**
Aphid	Acetamiprid, Bifenthrin, Cypermethrin, Dinotefuran, Gamma-Cyhalothrin, Imidacloprid, Lambdacyhalothrin, Malathion, Petroleum Oil, Piperonyl Butoxide, Potassium Salts of Fatty Acids, Spirotetramat, Thiamethoxam, Zeta-Cypermethrin	Azadirachtin, Neem Oil, Peppermint and Rosemary Oil, Pyrethrins
Cabbage Looper	Beta-Cyfluthrin, Chlorantraniliprole, Cryolite, Cyfluthrin, Emamectin Benzoate, Endosulfan, Esfenvalerate, Fenpropathrin, Flubendiamide, Gamma-Cyhalothrin, Indoxacarb, Lambdacyhalothrin, Malathion, Methoxyfenozide, Novaluron, Permethrin, Piperonyl Butoxide, Spinetoram, Tebufenozide, Zeta-Cypermethrin	Azadirachtin, <i>Bacillus thuringiensis</i> , Pyrethrins, Spinosad
Diamondback Moth	Acetamiprid, Beta-Cyfluthrin, Bifenthrin, Carbaryl, Chlorantraniliprole, Chlorpyrifos,	Azadirachtin, <i>Bacillus thuringiensis</i> ,

	Cryolite, Cyfluthrin, Emamectin Benzoate, Endosulfan, Flubendiamide, Gamma-Cyhalothrin, Indoxacarb, Lambdacyhalothrin, Malathion, Methoxyfenozide, Novaluron, Permethrin, Piperonyl Butoxide, Spinetoram, Zeta-Cypermethrin	Pheromones, Pyrethrins, Spinosad
Flea Beetle	Bifenthrin, Carbaryl, Cryolite, Cypermethrin, Dinotefuran, Endosulfan, Gamma-Cyhalothrin, Imidacloprid, Lambdacyhalothrin, Malathion, Piperonyl Butoxide, Thiamethoxam, Zeta-Cypermethrin	Azadirachtin, Kaolin, Pyrethrins
Whitefly	Beta-Cyfluthrin, Bifenthrin, Cyfluthrin, Cypermethrin, Dinotefuran, Endosulfan, Gamma-Cyhalothrin, Imidacloprid, Lambdacyhalothrin, Novaluron, Petroleum Oil, Piperonyl Butoxide, Potassium Salts of Fatty Acids, Spiromesifen, Spirotetramat, Thiamethoxam, Zeta-Cypermethrin	Azadirachtin, Neem Oil, Peppermint and Rosemary Oil, Pyrethrins

Weeds and Common Name of Herbicidal Controls

WEED	HERBICIDE*	OMRI LISTED HERBICIDE**
Preplant incorporated	Metam-Potassium, Metam-Sodium, Pyraflufen Ethyl, Trifluralin	Corn Gluten Meal
Preemergence	Bensulide, DCPA, Oxyfluorfen, Pelargonic Acid	
Postemergence	Carfentrazone-Ethyl, Clethodim, Glyphosate, Sethoxydim	Cinnamon and Clove Oil, Clove Oil, D-Limonene

* The above is a partial listing of controls intended as examples. Some labels may have been revoked since the publication of this guide. Refer to product labels for specifics and use accordingly. Ensure that products with one of the listed active ingredients are registered for the crop it is to be used on. Failure to do the above may result in crop injury, death and/or citation for law violation. Humans, animals and the environment may also be adversely affected by misuse.

** As stated in §205.206 of the National Organic Standards, pest management decisions should follow a hierarchical approach, which should be defined in a farm's organic systems plan. Please ensure that you have followed the appropriate steps and any product to be used in certified organic production systems has been approved by your certifying agent.

Harvest

Days after planting	Direct seeded - 50-60 days Transplanted - 40-45 days
Normal method	Hand harvested
Containers	Bulk wagons
Grades	Based on size and uniformity; no specified grades
Packaging/Handling	Roots - Film bags Leaves - Bunched
Anticipated yield/acre	100-200 field crates per acre (72 bunches per crate)

Transit Conditions

32°F at 98-100% RH (freezing point 20°F); shelf life: leaves 3-5 days, roots 7-10 days.

Comments/Production Keys

- Warm temperatures and increasing day length will cause early flowering of the heads
- Soil pH >7.8 may induce black hollow stems; Solubor (Bo) at 5-10 lbs/acre foliar applied prior to heading reduces severity
- Crop may have an allelopathic adverse effect on following crop
- High nitrogen requirements
- Shallow, horizontal rooting patterns dictates very shallow cultivation to avoid root pruning and reduced yields
- Production on light soils requires high level of management
- Better suited to early fall production in most areas of the state
- Water management very critical for stand establishment of early fall direct seeded crop