



# Cucumber (slicing)

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## Varieties

Ashley, Burpless, Dasher II, Diva, Poinsett 76, Slice Master, Spacemaster, Straight Eight, Suyo, Sweet Slice, Sweet Success

## Soil Preferences

Will tolerate a wide soil range but prefers well-drained sandy loams with a pH of 6.3-7.5; will tolerate acid soils as low as 5.5.

## Optimum Growing Conditions

Hot days (80-90°F) and warm nights (60-70°F). Growth favored by low humidity and dry conditions.

## Establishment Methods

<b>Planting Method</b>	Direct seeded
<b>Optimum Time</b>	Spring - Soil seed zone temperature 65-70°F Fall - approximately 75-80 days prior to first fall frost
<b>Seeding rate</b>	1.5-2.5 lbs/acre
<b>Approx seed/oz</b>	1,100
<b>Seeding depth</b>	0.5 - 0.75"
<b>Seedling spacing</b>	6-10" in-row on 40" raised beds. If needed, thin at 4 true leaves.

## Fertility/Fertilization

Rates presented as actual lbs/acre N<sub>2</sub>, P<sub>2</sub>O<sub>5</sub>, and K<sub>2</sub>O (base actual rates applied on soil test results).

Generalized rate: 80 - 80 - 80 lb/acre	
<b>N*</b>	60-100 lbs/acre; 2/3 pre-plant + 20 lbs/acre side-dress at thinning, vining and/or full bloom
<b>P</b>	60-90 lbs/acre banded approximately 2" below seed at planting
<b>K</b>	60-80 lbs/acre applied with the pre-plant nitrogen; normally not needed in most areas of Texas

\* Ammonium nitrate is very stable and least likely to evaporate. Urea and ammonium sulfate evaporate if not incorporated.

### Water/Irrigation

20 - 25" uniform moisture supply. Key stress stages are at establishment, vining and fruit development.

### Pest Management

#### Cucumber Diseases and Common Name of Fungicidal Controls

DISEASE	FUNGICIDE*	OMRI LISTED FUNGICIDE**
<b>Anthraco</b> <b>nose</b>	Azoxystrobin, Chlorothalonil, Copper Sulfate, Mancozeb, Maneb, Potassium Phosphite, Pyraclostrobin, Thiophanate-Methyl	<i>Bacillus subtilis</i> , Copper Hydroxide, Cuprous Oxide, Neem Oil, Potassium Bicarbonate
<b>Downy</b> <b>mildew</b>	Acibenzolar-S-Methyl, Azoxystrobin, Chlorothalonil, Copper Sulfate, Cymoxanil, Dimethomorph, Fenamidone, Fluopicolide, Fosetyl-AI, Mancozeb, Mandpropamid, Maneb, Potassium Phosphite, Propamocarb Hydrochloride, Cyazofamid, Pyraclostrobin, Sodium Tetraborohydrate Decahydrate, Trifloxystrobin	<i>Bacillus pumilus</i> , <i>Bacillus subtilis</i> , Clove, Rosemary and Thyme Oil, Copper Hydroxide, Cuprous Oxide, Extract of <i>Reynoutria sachalinensis</i> , Hydrogen Dioxide, Neem Oil, <i>Streptomyces lydicus</i> , Potassium Bicarbonate
<b>Fruit rot</b>	Mancozeb, Potassium Phosphite	
<b>Nematode</b>	1,3-Dichloropropene, Chloropicrin, Ethoprop, Metam-Potassium, Metam-Sodium, Sesame Oil	Azadirachtin
<b>Powdery</b> <b>mildew</b>	Acibenzolar-S-Methyl, Azoxystrobin, Copper Sulfate, Kaolin, Kresoxim-Methyl, Myclobutanil, Paraffinic Oil, Potassium Phosphite, Potassium Salts Of Fatty Acids, Polyoxin D Zinc Salt, Pyraclostrobin, Sodium Tetraborohydrate Decahydrate, Sulfur, Tebuconazole, Thiophanate-Methyl, Trifloxystrobin	<i>Bacillus pumilus</i> , <i>Bacillus subtilis</i> , Clove, Rosemary and Thyme Oil, Copper Hydroxide, Cuprous Oxide, Extract of <i>Reynoutria sachalinensis</i> , Hydrogen Dioxide, Neem Oil, <i>Streptomyces lydicus</i> , Potassium Bicarbonate
<b>Viruses</b>	Paraffinic Oil	

### Cucumber Insect Pests and Common Name of Insecticidal Controls

INSECT	INSECTICIDE*	OMRI LISTED INSECTICIDE**
<b>Aphid</b>	Acetamiprid, Bifenthrin, Dinotefuran, Endosulfan, Fenpropathrin, Imidacloprid, Lambdacyhalothrin, Malathion, Oxydemeton-Methyl, Permethrin, Petroleum Oil, Potassium Salts of Fatty Acids, Sodium Tetraborohydrate Decahydrate, Soybean Oil, Thiamethoxam, Zeta-Cypermethrin	Azadirachtin, Garlic Juice Extracts, Neem Oil, Pyrethrins
<b>Cutworm</b>	Beta-Cyfluthrin, Bifenthrin, Carbaryl, Cyfluthrin, Deltamethrin, Diazinon, Esfenvalerate, Flubendiamide, Lambdacyhalothrin, Malathion, Permethrin, Zeta-Cypermethrin	Azadirachtin, <i>Bacillus thuringiensis</i>
<b>Leafminer</b>	Abamectin, Cyromazine, Deltamethrin, Dinotefuran, Lambdacyhalothrin, Malathion, Paraffinic Oil, Permethrin, Petroleum Oil, Soybean Oil, Spinetoram, Thiamethoxam, Zeta-Cypermethrin	Azadirachtin, Garlic Juice Extracts, Spinosad
<b>Looper</b>	Methomyl	Azadirachtin, <i>Bacillus thuringiensis</i> , Garlic Juice Extracts, Pyrethrins
<b>Melonworm</b>	Acetamiprid, Beta-Cyfluthrin, Bifenthrin, Carbaryl, Chlorantraniliprole, Cryolite, Cyfluthrin, Deltamethrin, Endosulfan, Flubendiamide, Indoxacarb, Lambdacyhalothrin, Methomyl, Methoxyfenozide, Permethrin, Spinetoram, Zeta-Cypermethrin	Azadirachtin, <i>Bacillus thuringiensis</i> , Spinosad
<b>Mite</b>	Oxydemeton-Methyl, Paraffinic Oil, Petroleum Oil, Sodium Tetraborohydrate Decahydrate, Soybean Oil	Azadirachtin, Garlic Juice Extracts, Neem Oil
<b>Pickleworm</b>	Acetamiprid, Beta-Cyfluthrin, Bifenthrin, Carbaryl, Chlorantraniliprole, Cryolite, Cyfluthrin, Deltamethrin, Endosulfan, Esfenvalerate, Indoxacarb, Lambdacyhalothrin, Malathion, Methomyl, Methoxyfenozide, Permethrin, Spinetoram, Zeta-Cypermethrin	Azadirachtin, <i>Bacillus thuringiensis</i> , Garlic Juice Extracts, Spinosad
<b>Whitefly</b>	Beta-Cyfluthrin, Bifenthrin, Cyfluthrin, Deltamethrin, Dinotefuran, Endosulfan, Fosetyl-Al, Imidacloprid, Lambdacyhalothrin, Paraffinic Oil,	Azadirachtin, Garlic Juice Extracts, Pyrethrins

	Petroleum Oil, Potassium Salts of Fatty Acids, Spiromesifen, Thiamethoxam	
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### Weeds and Common Name of Herbicidal Controls

WEED	HERBICIDE*	OMRI LISTED HERBICIDE**
<b>Preplant incorporated</b>	Clomazone, Ethalfluralin, DCPA, Bensulide, Trifluralin	Corn Gluten Meal
<b>Preemergence</b>	Ethalfluralin, DCPA	
<b>Postemergence</b>	Carfentrazone, Oxyfluorfen, Paraquat, Halosulfuron, Sethoxydim, Glyphosate, Pelargonic Acid, Clethodim	D-Limonene, Clove Oil, Cinnamon and Clove Oil

\* 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

<b>Days after planting</b>	60-65; when fruit are: <ul style="list-style-type: none"> <li>• Dark green</li> <li>• 5-8" in length</li> <li>• 1.5 - 2" in diameter</li> </ul>
<b>Normal method</b>	Multi-hand harvest
<b>Containers</b>	50 lb sacks or bulk bins
<b>Grades</b>	U.S. Fancy, U.S. #1, U.S. #2 based on uniformity of shape, size, color and defects
<b>Packaging/Handling</b>	47-55 lb or 26-32 lb waterproof cardboard cartons
<b>Anticipated yield/acre</b>	250-400 bushels (50 lbs)/acre

### **Transit Conditions**

45-50°F and 90-95% RH; shelf life 10-14 days (subject to chilling injury if held 2 or more days below 45°F).

### **Comments/Production Keys**

- Most varieties produce predominately female flowers; bees are essential (one strong hive/acre containing at least 3-4 lbs of bees in 5 broods of varying stages).
- Place hives in groups around the field at first bloom, preferably on the windward side
- Avoid spraying between 8 - 11 a.m. (period of greatest bee activity); preferably spray at night
- Rainy or windy weather can reduce bee activity and cause yield and quality reductions
- Collapsed or misshapen fruit is an indication of poor pollination
- Excessive nitrogen or water can delay maturity
- Irrigating every other bed can aid harvest scheduling
- 2-4 day harvest schedule required to keep up with fruit set
- Good weed control and vine training on beds are a must for efficient harvest (avoid deep cultivation)
- Temperatures > 95 - 100°F or other plant stresses can cause sex reversion in flowers and a subsequent yield reduction
- Temperature < 60°F can delay maturity as much as 15 days; <50°F, severely stunted plants and reduced yield
- Fruit subject to shriveling (waxing and storage under high relative humidity reduces severity)