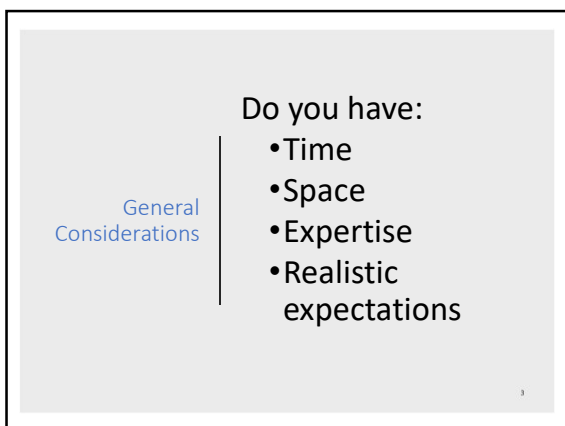


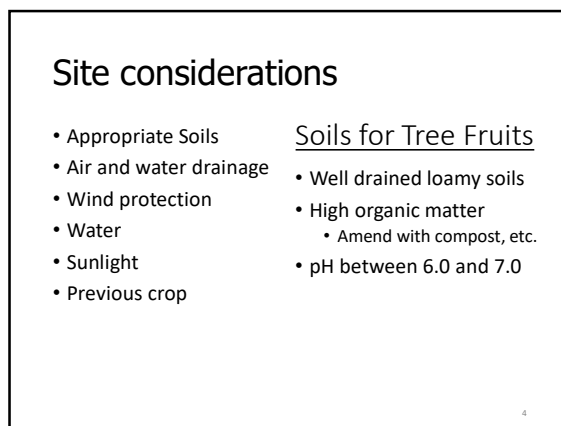
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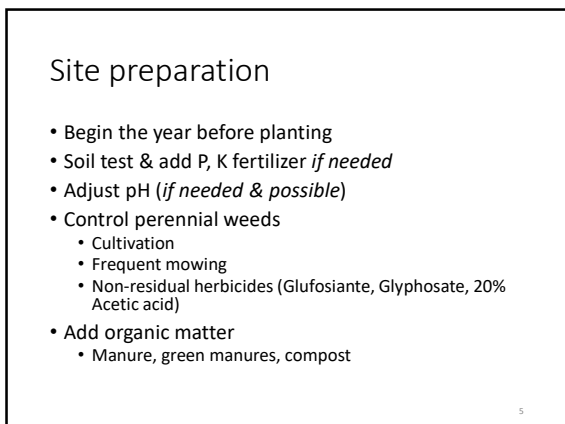
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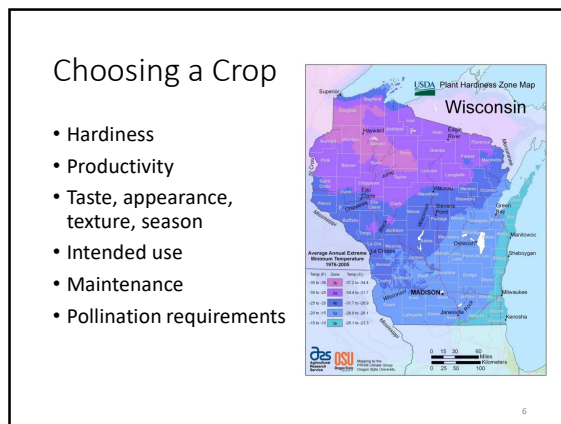
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Learningstore.extension.wisc.edu

Home Fruit Cultivars for Southern Wisconsin
\$11.50

Authors: A. Altsch, B. R. Smith, J. van Zeeven

Find out which fruit cultivars are recommended for your area. Describe flavor, ripening date, winter hardiness, when to buy, and more. This fact sheet covers the following 24 pages (2017):

- Tree fruits (apples, pears, Asian pears)
- Stone fruits (apricots, sweet cherries, tart cherries, plums, peaches)
- Small fruits (strawberries, raspberries, currants, elderberries, gooseberries, jordanberries or gooseberries, grapes, blueberries)

New publication

7

Maintenance

- Minimum Maintenance** – simple pruning, usually not more than one pest control application, adaptable to soil conditions, may need protection from birds/chipmunks
Current, elderberry, filbert, gooseberry, serviceberry, strawberry
- Moderate Maintenance** – Pruning, 1-5 pest control application, protection from rabbits
Raspberry, blueberry, blackberry, cherry, apricot
- High Maintenance** – >5 pest control application, pruning
Apple, grapes, pears, peach, plums

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Pollination Requirements

Crop	Required	Not required	Beneficial
Apple			
Pear			
Asian Pear			
Tart cherry			
Sweet cherry			
Peach/nectarine			

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Pollination Requirements

Crop	Required	Not required	Beneficial
Apricot			
Euro.Plum			
Hybrid plums			

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All fruit plants are perennial

- Buds produced previous year
- Fruit produced the following year
- Plant and buds must overwinter
- Fruit buds require chilling period (time period below 45°F)

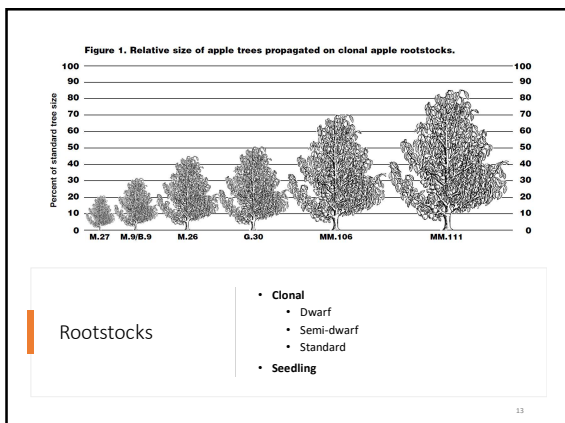
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Rootstocks

- Hardiness
- Size Control
- Precocity
- Anchorage & root strength
- Disease or insect resistance

Reliable nursery tag each tree with name of the cultivar and the rootstock used
For example: McIntosh/M27

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Steps in tree planting

- Wide shallow hole
- Prune off long or damaged roots
- The roots should be spread, not circling
- Backfill with the original soil
- Graft union 2-3" above soil
- Water immediately

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Staking

- Stake trees on dwarfing root stock immediately after planting
- 2" diameter round stake or 2 X 2 lumber or steel fence post
- Stake should be 10 feet long and should extend about 24-30 inches into the ground
- Place the stake 3-4 inches from the tree trunk
- Fasten the stake using non-metallic rope, tape, or fabric strips
- Advantages:
 - Prevents wind whipping
 - Supports graft union
 - Helps maintain central leader
 - Critical for dwarf trees

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Irrigation

- First year of planting – 1-2" (3-5 gallons) of water weekly
- Regular watering from planting until leaf fall
- As trees gets older, their roots explore larger volume of soil and irrigation becomes less critical

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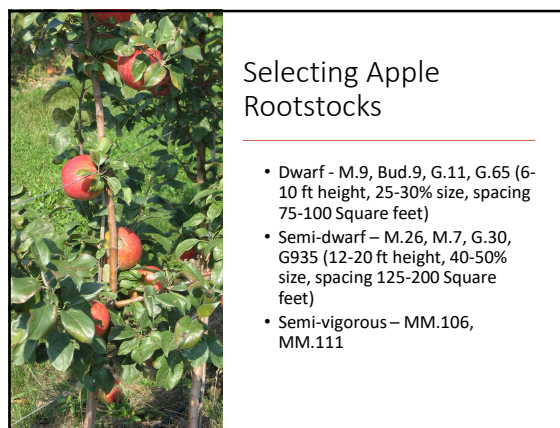
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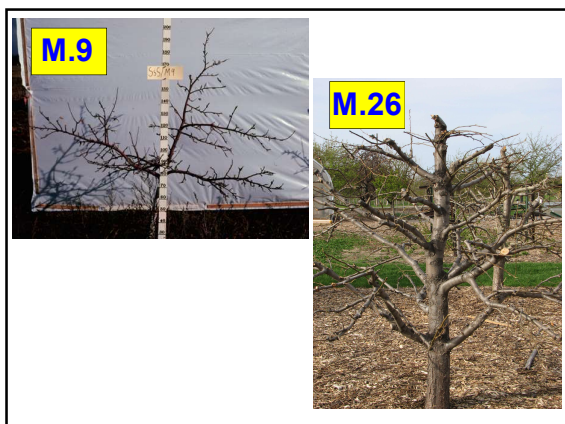
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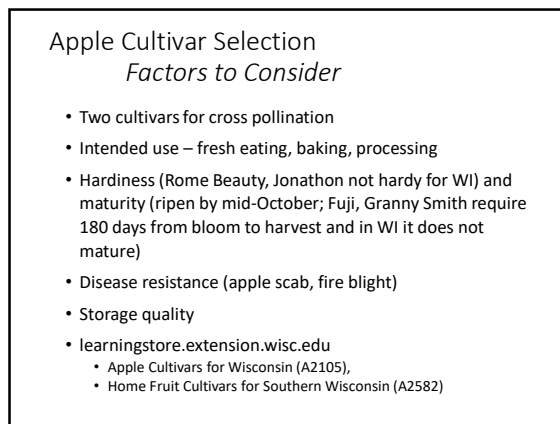
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Two Scion Types

- Spur Type Strain – Fruits are borne on short shoots called spurs, branches are compact in nature and are about 25% smaller than standard types, produce fruit earlier than standard types, not all spur type strain recommended for Wisconsin
- Standard Type – Fruits are borne on longer shoot or intermediates




Photocredit: Waimanurseries.co.nz

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Scion Selection

- Early Cultivars (Mid to last week of August)
 - Red Free (scab resistant)
 - Zestar
 - Paula Red
 - Lodi
 - Sweet Tango
 - Jersey mac



Zestar (Photo credit: Jungseed.com)

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Mid-Late Season Cultivars (Mid September to mid October)

- Honey Crisp
- Golden Delicious (spur type not recommended)
- Red Delicious (Oregon Spur, Redchief)
- Liberty
- Jonafree
- Cortland
- McIntosh (Mac Spur, RedMax)



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Disease Resistant:

- Red Free – Early season, ripens in late August, resistant to scab, cedar apple rust
- Jonafree- Pale yellow flesh, firm and juicy, mildly tart
- Nova Easygro – A good quality fall apple, large fruit with white flesh and a sweet one, ripens late September
- Liberty – High quality red color apple, crisp, juicy, yellowish flesh, good for fresh use and cooking, ripens late September



Fire Blight

Apple Scab

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Antique Apples

- Wolf River
- Holstein
- Winesap
- Wealthy
- Gravenstein
- Black oxford
- Duchess of oldenburg

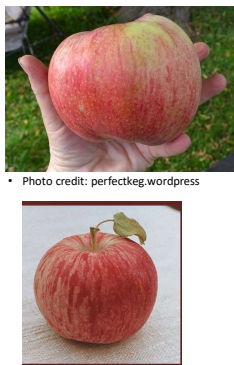


Photo credit: perfectkeg.wordpress

Photo credit: Jungseed.com

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Training & Pruning

- learningstore.extension.wisc.edu
- A 1959: Training and Pruning Apple Trees by T.R. Roper
- March 16th – Apple pruning demonstration class, at Kenosha County Center, 19600 75th St, Bristol

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Pest Management

- A2179: Apple Pest Management for Home Gardeners
- <http://learningstore.extension.wisc.edu>



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Harvesting Apples

- Harvest at peak maturity
- Don't judge the fruit maturity by its reddish skin color
- Taste test – sweet, aromatic
- Seeds – green to tan/brown
- Harvest over two weeks period



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Intro to Pears



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Growing Pears

- Spacing-200 to 350 square feet
- Selecting Root Stocks
 - European pears -Old Home x Farmingdale Series
 - OH x F97, PH x F87, OH x F333
 - Quince rootstock not hardy for Wisconsin
- Asian pears – *Pyrus betulaefolia*
 - Quince rootstock not hardy for Wisconsin



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Cultivar Selection – European Pears

	Mid July	Mid August	Late August	Early September	Late September
European Pears	Ubileen	Summercrips			Patten
		Parker			Luscious
		Harvest Queen		Honeysweet	Harrow Sweet
		Harrow Delight		Gem	Gourmet
Asian Pears		New century	20 th century	Bartlett	Flemish Beauty
		Chojuro			

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Harvesting Pears

- Skin changes to a yellowish green color and becomes smooth and waxy
- The white spots on the fruits will turn to brown
- Fruits will come off easily from the branch with a gentle upward twist.
- Takes 3-4 days for the mature fruits to ripen indoors at normal room temperature



Harrow Sweet (Photo credit: jungseed.com)

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Growing Tart Cherries

- Rootstock – Mahaleb
- Cultivars – Balaton, Evans, First Editions Sweet Cherry Pie Cherry, Meteor, Montmorency, North star, Suda, Surefire, Carmine Jewel, Crimson Passion
- Self pollinating
- Ripens – Mid to late July



First Edition's Sweet cherry pie
(photo credit: firsteditionplants.com)

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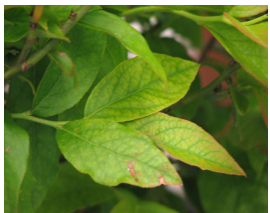



Bird nets (1/4" nylon mesh size)

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Blueberry Soil pH – 4.5 to 5.5

- Acidic, moist, well drained, and high organic matter content (> 3%)

Iron chlorotic (yellowing) leaves in high soil pH (>7)

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Intro to Blueberries


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Blueberry Types


<p>High bush</p> <ul style="list-style-type: none"> • Taller plants (up to 9'), vigorous in growth, self fruitful but less winter hardy • Cultivars – bluecrop, patriot, Jersey 	<p>Half high</p> <ul style="list-style-type: none"> • Medium size plants (2- 5'), winter hardy, suitable for container plantings • Second week in July to early August • Cultivars – Northland, Northblue, polaris, Northsky, St. Cloud, Superior
<p>Low bush</p> <ul style="list-style-type: none"> • Low growing (6 to 18"), spreading type, fruits are about pea size, winter hardy • Cultivars – Top hat 	

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If your soil pH >7.0



Trench System




Container System

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Container Planting


- Best time for planting – mid spring
- Container size 5 gallon to 55 gallon, sufficient drainage holes
- For patio settings, avoid black color container
- Best to bury containers in ground, place an inch of gravel underneath container



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Soilless Media Recipe

- 1 part mini nugget pine bark
- 1 part peat
- 1 part perlite (optional)



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- Don't disturb the root ball
- Don't bury the root ball deep in to the container
- Apply elemental Sulphur
- Water it immediately
- Apply 2 inches of mulch using pine bark or sawdust
- Frequent light watering
- Repot every 3-4 years



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Container Trial Varieties


- Containers (5 -8 gallon size)
 - Patriot
 - Northland
 - Northblue
 - Northsky
 - Superior
 - Chippewa
 - Top Hat
 - Bluecrop



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Fertilization

- Annual fertilization needed:
 - Elemental sulfur
 - Miracid
- Fertilizer timing:
 - Spring - 1 tbsp. of elemental sulfur for every 4" container
 - Miracid from mid/late spring to mid summer once in 2-3 weeks
 - Mix 1 tbsp. of Miracid for every gallon of water



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Organic Fertilizer (Dr. Brian Smith, UW River Falls)

N Source	Analysis	Action rating	Comments
alfalfa meal	3-1-2	slow to med. (3 mos.)	good micro source
fish meal	10-4-0	slow(4-6 mos)	
fish emulsion/seaweed/kelp	varies	quick	use for foliar feeding, check analysis
blood meal	12-1.5-0.6	med-fast (6-8 weeks)	
cottonseed meal	6-2.5-1.7	slow to med (4-6 mos)	some sources are contaminated and not allowed for organic prod.
soybean meal	6.7-1.6-2.3	slow-med "	
well-composted manure/compost	varies dramatically	slow to med (usually)	check sources for compost; conduct analysis

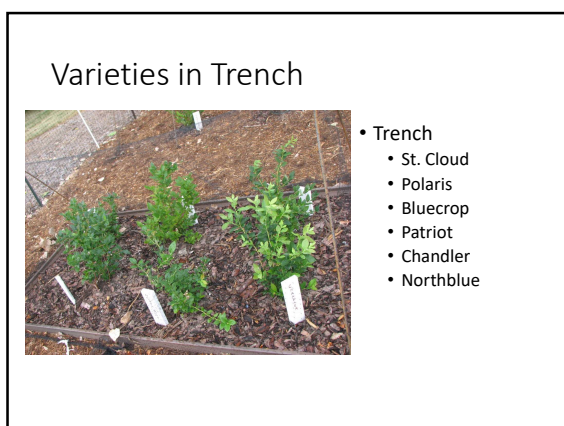
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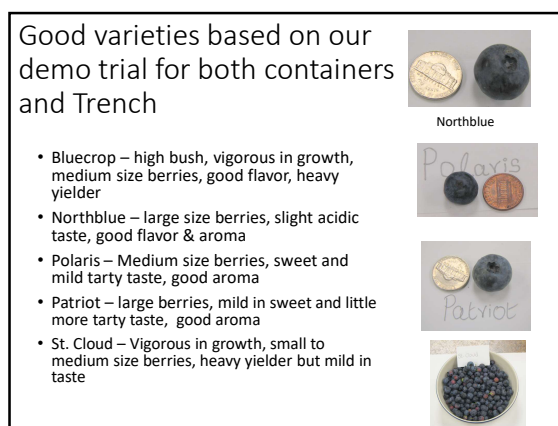
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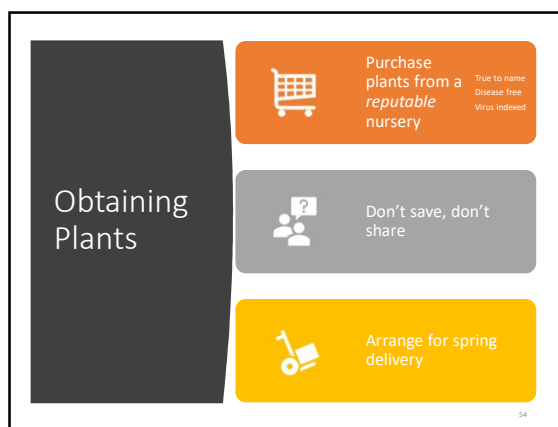
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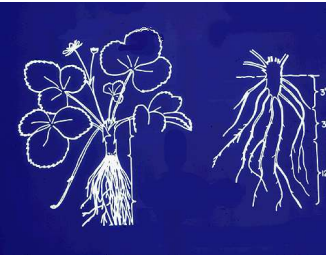
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Strawberry Plant

- Crown
- Leaves
- Stolons (runners)
- Roots (Shallow)
- Trusses (flowers and fruit)

- Plantings last 3-5 years

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Growth and Fruiting Habit

- Junebearing Cultivars
 - Mid June to early July, productivity 3-6 years
 - Annapolis, Earliglow, Honeoye, Jewel, Cavendish, Wendy, Sparkle
- Everbearing Cultivars
 - Fruiting in late spring and late summer/early fall, replanted every other year
 - Fort Laramie, Ozark Beauty
- Day-neutral cultivars
 - Fruiting in July, replanted every year
 - Albion, Tristar, Tribute, Seascape


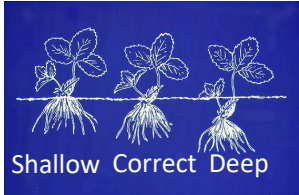
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Planting

- Spring after danger of frost past
- Proper depth
- Spread roots
- Firm soil around crown

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PLANTING DEPTH

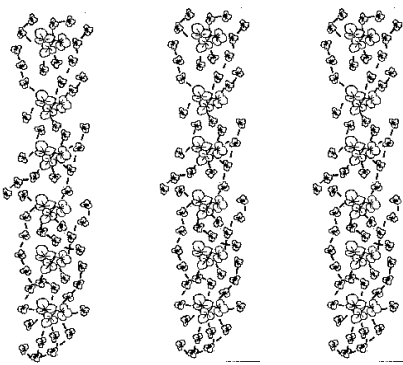
Shallow Correct Deep

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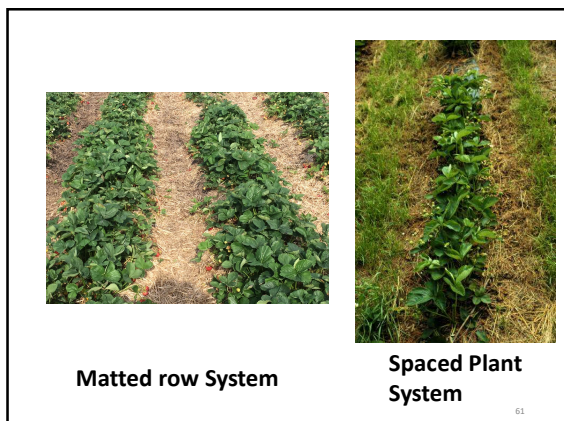
Strawberry planting systems

• Matted Row	• Spaced Plant
• 12 to 18" between plants	• 6" between plants
• 36 to 40" row spacing	• 36 to 40 row spacing
• Beds 12-18" wide	• Single plant row
• Runners encouraged	• Runners removed

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Remove blossoms the first year

- Remove blossoms the first year - Promotes vegetative growth
- Strawberry is shallow rooted, require 1 to 2 inches per week

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<p>Irrigation</p> <ul style="list-style-type: none"> • Strawberry is shallow rooted • The soil must not dry out • Require 1 to 2 inches per week 	<p>Fertility</p> <ul style="list-style-type: none"> • Amend soil before planting • Do Not add fertilizer before harvest <ul style="list-style-type: none"> • Get leaves, not fruit
---	--

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Renovation

- Begin *immediately* after harvest
- Control weeds
- Mow leaves if leaf diseases serious
- Narrow rows
- Place soil around crowns
- Incorporate mulch
- Fertilize

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Fertility

- Year 1, mid June - when runners form apply:
 - ½ to 1/3 lbs urea per 100 feet of row
- Renovation
 - 1/3 lb urea per 100 feet of row
- Early – mid August
 - 1/3 lb urea per 100 feet of row
- Water thoroughly

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Winter Mulch

- Straw 2-3"
- Apply when soil freezes (*late*)
- Remove in spring as leaves emerge (*early*)
- Spun-bonded polyester row covers

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