Growing Grapes In Texas
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HEEL IN VINES IMMEDIATELY AFTER DELIVERY

Keep moist but not wet

Cover vines completely with loose soil

TRIMMING NEW VINES

Leave only 2 buds
Remove roots
Trim roots to 3 inches
IN WATER.

PLANTING

KEEP ROOTS IN WATER

We must never let the roots dry out.

PLANTING THE VINE

Pack soil

Place vine close to stake

Spread roots

Water immediately after planting
FIRST GROWING SEASON

This is all we tie the first year.

PRUNING BEFORE SECOND YEARS' GROWTH BEGINS

All other shoots are pruned off.

Leave only 2 buds.
SET END POSTS

Use new posts which are 8 to 10 inches in diameter. Space rows 12 feet apart.

END POSTS:
- Cedar
- CCA
- Creosote
- Penta
- Concrete

Pack soil tightly

Place 36 inches in ground.

ANCHOR END POSTS

Use 9 gauge anchor wire.

Use trailer house anchor screws or large rock as deadman.
**SET INTERMEDIATE POSTS**

Intermediate posts prevent the trellis from laying over during high winds.

Use new 8 foot pressure treated posts which have a 4 inch top.

Place 32 inches in ground.

**LINE UP STAKES**

Sight in stakes between end posts and intermediate posts.

Place stakes at each of the vines which are 8 feet apart in the row.
DRIVING THE STAKES

STAKES:
- Cedar stays
- Steel
- CCA - wood
- Penta - wood
- Redwood

Place 18 inches into the soil.

Do not drive staple tight.

Staple wire to all intermediate posts first.

Use 13 gauge wire.

LINING OUT WIRE
Pull wire tight before turning—then make 6 to 10 turns.

**STRETCHING WIRE**

Attaching wire to stakes:

There are many ways to attach wires to stakes.
Always safely tie the shoot before cutting off the others.

SELECTING TRUNK SHOOT

TRUNK GROWTH IS VERY FAST

We have to tie every 5 to 10 days.
Never tie shoots or canes too tight!

USE LOOSE TIES

KEEP TRUNK STRAIGHT

Do not leave bows in the trunk.
SELECT CORDON SHOOTS

You will never get 2 cordon shoots!

Wrong Cordon Selection

Never use trunk shoot for a cordon

I'm cutting out trunk shoot at the wire.

Select 2 cordon shoots 6 to 8 inches below wire

42 inches
No, no – we want only one shoot on each side!

Wrong Cordon Shoot Selection

Never tie within 18 inches of the shoot tip!

Wrong Shoot Tying

Tip is easily broken
Loosely
tie cordon
shoot

clean laterals off
trunk

REMOVE LATERAL SHOOTS

Pulling off
laterals will
damage the
trunk

Use
Shears

WRONG LATERAL REMOVAL
Cut out tendrils to prevent girdling the trunk.

REMOVE TENDRILS

Cut suckers off at the trunk and below ground.

REMOVE SUCKERS
DORMANT CORDON TRAINING
BEFORE THIRD YEARS' GROWTH

Cut at 3/4 inch diameter

Make 3 loose ties on the cordon canes

CUT BACK WEAK VINES

Cut at bend

Bud on lower side
SELECT AND TIE VERTICAL SHOOTS

Vertical arms 5 to 6 inches apart
Catch wire 10 inches above cordon wire

SUMMER PRUNING THE THIRD YEAR

Pinch very vigorous shoots
Rub off shoots on lower side of cordon
Tie cordon extension shoots
Why are we pulling off these beautiful grapes?

We must leave only one cluster per shoot to keep the vines healthy.

**CLUSTER THINNING THE THIRD YEAR**

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Cut vertical canes on cordon extension back to 1 bud each.

Total cordon length is 42 inches.

**DORMANT PRUNING BEFORE FOURTH YEAR**
Before Cordon Pruning

All 28 of these canes will be cut back to form 2 or 3 bud spurs.

After Cordon Pruning

We now have only 14 spurs and 30 to 40 buds left on the vine.

Wrap the cordon around the wire 1 1/2 turns and tie.

Leave 3 buds per spur.
DORMANT CORDON PRUNING

Cane

Make spur cut through the next bud.

Prune for a 2 or 3 bud spur.

Cordon 5 to 6 inches vertical arm.

These spurs are too long! They have 7 buds each. We need 2 or 3 buds per spur.

WRONG SPUR PRUNING
Heavy pruning is needed on weak vines to increase vine growth and health.

**PRUNING WEAK VINES**

Five year old vines produce first full crop of over 70 clusters.

**RESULTS OF CORDON PRUNING**
DEVELOPING TRUNK FOR CANE TRAINING

When the vine reaches the top, we pinch it to force lateral shoots. Tie trunk every 5 to 10 days.

Remove laterals from lower trunk.

TIEING SHOOTS FOR CANE TRAINING

Once 4 laterals are safely tied, remove others. Loosely tie laterals.

Select laterals below the wire.
DORMANT PRUNING FOR CANE TRAINING BEFORE THIRD YEAR

Loosely tie canes to wire

Cut at ¾ inch diameter to leave only 3 or 4 buds per cane.

CLUSTER THINNING FOR CANE TRAINING THE THIRD YEAR

We want to remove all but one cluster per shoot the third of year to keep the vines healthy.
These are the canes we leave. All others are cut out.

Before Dormant Cane Pruning

All but 8 of these canes will be removed when the old fruiting canes are cut out.

These 8 will give us 4 canes and 4 renewal spurs.

Dormant Cane Pruning
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AFTER DORMANT CANE PRUNING

Leave only one cane with 10 buds from each renewal spur on each horizontal arm.

Tie

Remove old fruiting canes entirely

Cane

Horizontal arm

RESULTS OF CANE PRUNING

Look – our pruning has paid off – 80 clusters on a healthy vine!
MECHANICAL WEED CONTROL

Disc 6 to 10 times a year to control weeds while they are small.
Disc before each furrow irrigation.

PRUNING SHOOTS

Cut low hanging shoots before spraying contact herbicides or before harvest.
PROTECT YOUNG VINES
from herbicides, rabbits and wind.

CONTACT HERBICIDE
Use back pack sprayer to kill weeds under the vines.
Keep spray off the vine trunk.
MOWING SOD

Vineyards with grass middles should be mowed at least once a month. Contact herbicides will be needed under the vines.

DISC BEFORE PREEMERGENCE HERBICIDE

Remove all weeds before spraying.
SPRAYING PREEMERGENCE HERBICIDES

Apply in March before grape growth begins.

Uniform spray coverage.

INCORPORATING PREEMERGENCE HERBICIDES

Move treated soil under the vines.

Disc 3 to 6 inches deep.
TAKING A SOIL SAMPLE

Collect 75 leaf petioles for each variety in poly bags.

Leaf petiole samples will help in deciding when and what kind of fertilizer is needed.
IRON CHLOROSIS

This vine needs iron.

The leaves are yellow; the veins are green.

FERTILIZING

If fertilizer is needed spread ½ cup uniformly under each vine.
CHECKING SOIL WATER DRAINAGE

Fill hole with 5 to 7 gallons of water

Dig hole 32 inches deep and 8 inches wide

Soil is moist

This is poor soil.

DRAINAGE GUIDE
Excellent .... 1 hour
Very good .... 8 hours
Good ........ 24 hours
Adequate .... 48 hours

The hole should be empty in 48 hours.
When soil is very dry, it is time to irrigate.

CHECK FOR SOIL MOISTURE

LOWER WIRE FOR DRIP IRRIGATION

Install drip system before planting vines.
Attach drip line to 1/8 inch wire.

Place emitter one foot from vine.

DRIP IRRIGATION

We need the correct gallons per hour

MEASURE WATER DELIVERY
CHECK ALL EMITTERS

Flush or replace stopped emitters

TOO MUCH IRRIGATION

Yellow wilted leaves

Poor soil drainage
IRRIGATION FURROWS

Build a small irrigation furrow down each side of the rows after discing for weed control. This will be needed 3 to 8 times a year.

FLOOD IRRIGATION

Keep water in furrows
SPRAYING
Spray only when needed to prevent disease and to kill insects.
Keep spray thoroughly mixed.

Put the chemicals on the grapes—
not you!

Cover every cluster

SPRAY FUNGICIDES TO PREVENT BLACK ROT DURING RAINY WEATHER
This amount will go in 200 gallons of water and spray 1 acre.

READ
PESTICIDE LABEL

BATHE IMMEDIATELY AFTER SPRAYING

Always put on clean clothes

Wash dirty clothes
**Wrong Sprayer Cleaning**

Never stick your head in the tank! It will kill you in a second!

**Sprayer Maintenance**

Drain pump each winter to prevent freeze breakage.

Each day wash tank 8 times with clean water after use. Also flush pump and hose.
Use shotguns, butane cannons, hawk kites, distress tapes and nets to keep birds out of the vineyard at harvest.

**PROTECT HARVEST FROM BIRDS**

**DEER PROOF FENCE**

Deer, raccoons and many other animals love to eat grape vines.
**HARVEST DATE**

We cannot harvest until the sugar and aced is ready.

We collected 15 clusters from each variety.

**HARVESTING IS HARD WORK**

Pickers like to wash sticky sugar from their hands.

Supply plenty of fresh cool water.
HARVESTING HAZARDS

Picker should wear long sleeve shirts and gloves to reduce sunburn, cane whipping and sticky sugar irritation. Look out for wasps, bees and snakes.

I'm trying to keep ahead.

KEEP PICKERS SUPPLIED WITH EMPTY PANS

Pickers want to move fast.
CORRECT HARVESTING METHOD

Always use an upper cut, moving the knife away from your body.

Drop clusters gently into pan.

Place pan under vine

Don’t milk the clusters, it crushes the grapes.

Use your knife— you are ripping the shoots off!

WRONG WAY TO PICK
HARVEST ALL THE FRUIT

Strip the vines clean.

CULL BAD FRUIT

All diseased and green clusters should be removed from the vines and pitched on the ground.
**KEEP GRAPES COOL**

Move grapes to winery as soon as possible.

Slide pans into shade under vines.

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**WRONG WAY TO HANDLE GRAPES**

Don't crush the grapes in the vineyard.

Keep dirt out of pans.
WE HAVE BROUGHT YOU THE STORY OF HOW TO GROW GRAPES IN TEXAS...

Now the job is yours!
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