

Proper Vine Tying

Vine tying is a necessary task for training new vines and maintaining vine structure into vine maturity. Although tying a shoot or woody part of a vine may seem a routine and simple task, many errors are common in vineyards, some of which can result in poor vine growth or setbacks in production. This *Grower Guide* provides a quick review of vine tying basics, common vine tying materials, and examples of proper and improper vine tying practices.

Improper Vine Tying Issues

Two common problems can arise when crews are tying vines.

- 1. Using the incorrect ties, which can either cause girdling and vine damage or else can be ineffective at holding the trunk or cordon in place.
- 2. Using the correct ties incorrectly tying them too tightly or double wrapping the ties, which increases the risk of girdling.



A heavy-duty tie like this does not stretch enough and will girdle the vine.

When is Vineyard Tying Needed

Planting stage

When staking newly planted vines ties are needed to attach the selected shoot(s) to the stake for trunk establishment.

Throughout the growing season

As needed to lay down new cordons in one or both directions or to position shoots.

When retraining vines

As needed for training a trunk extension for a partial trunked vine or replacing a damaged trunk or cordon (renewal).

Once vine growth stops in the fall, additional tying for trunk and cordon development should wait until after dormancy.



What Ties to Use

Best / Preferred	For most young vines, the only material you should use is flat, vinyl plant tie tape. This tape is stretchy, does not easily girdle, and is readily available from most orchard supply stores and other online retailers. The most common tape width is 0.5 inches. This tape is usually found in green or brown colors but can be found in red and other colors, which can be easier to see in the vineyard.	
OK for Older Vines	If you have vines 5 years or older that have large gnarly trunks, and the green plant tie tape is no longer strong enough, you can switch to green or brown stretchable tube/tubular ties. Other non-girdling trunk and cane ties include larger format rubber bands or "cane fix" ties. Be sure to select a size that will not girdle.	0000
Never	Never use any type of zip tie, plastic tie (e.g. AgLock), or any type of tie with wire in it. Growers sometimes think it is ok to use these types of ties because they plan to cut the ties off, but 99% of the time growers either forget or miss some ties and end up with girdled vines.	

How to Properly Tie Vines

- 1. Vine tying should be done by hand*.
- 2. Ties should be loose enough to slip a pencil between the tie and the vine or shoot.
- 3. Ties should only be wrapped once around a shoot or trunk.

*It is not my preference, but for efficiency in the vineyard, staple types of tools like <u>this</u> can be used if needed only on green-growing shoots for vine training. Any more permanent tying must be done by hand with the flat vinyl plant tie tape.



Proper trunk tying... not too tight and a single loop



Vine Tying Examples - Good

Vinyl tie tape can be used with a tape dispensing tool or tied by hand. This tape is preferred for tying up shoots to train trunks or cordons (hand or dispensing tool tied) or to tie young woody trunks and cordons (preferably hand tied).





Vinyl tie tape is the best choice for loosely tying growing shoots to train as trunks or cordons.



Vinyl tie tape may come in different colors. This is a properly tied shoot, loose enough to prevent girdling and secure enough to form a straight trunk. Place a tie about every 12 to 14 inches for best results.



Hand-tied vinyl tie tape should secure under 2-year-old trunks before a heavier stretchy material is required.



Vine Tying Examples – Acceptable

Rubber bands or "cane fix" ties will stretch to prevent girdling, **but the proper length must be used for the thickness of the trunk, cordon, or cane being tied.** These ties are best for 1-year-old wood or older.





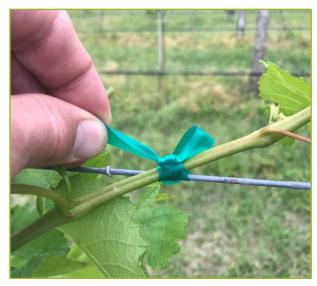
Rubber tie used on one-year-old cane showing loose fit to allow for growth of cordon wood. **If the proper size is selected** these ties should degrade in a few years before girdling can occur.



Stretchable tube ties can be used on trunks and cordons **3 years old or older**. These ties can be purchased in bundles or pre-cut lengths. Green is the most common color but brown is also available.



Vine Tying Examples – Correct Ties Used Incorrectly



Vinyl tape should not be tied too tightly on shoots or canes or girdling may occur, causing delays in vine development.



Example of a vinyl tie too tightly wrapped around a shoot trained for a vine trunk.



Double tying can lead to girdling.



Leaves should not be bunched up in ties.

Don't let your vines look like this! Choose the proper tie size to match the wood.





Vine Tying Examples – Incorrect Ties Used



Avoid hard plastic ties or zip ties as they do not stretch and may cause girdling of canes and permanent vine wood.



Wire ties should be avoided as they can girdle cordons or trunks.



Hard plastic zip ties should never be used to train vines. They are not adjustable and will girdle trunks and cordons.



Hard plastic "AgLock" or stretch-resistant plastic-type ties will girdle if not adjusted regularly, and they should be avoided.

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