

# Des pointes recourbées signalent une carence en calcium

John Kempf, 29 juin 2020

Les pointes des pampres devraient être verticales et pointer presque droit vers le haut, surtout le matin. Pendant la journée, s'il fait très chaud, elles peuvent se courber légèrement, mais doivent rester plus ou moins droites.

Lorsqu'une pointe est pliée vers le côté, comme c'est le cas ici, c'est un indicateur d'une carence en calcium. Ce phénomène peut également être l'expression d'un sol sec et d'un manque d'eau. Comme la plante doit absorber le calcium via les racines pendant chaque photopériode de 24 heures, pour le transférer ensuite via le xylème vers la nouvelle pousse, dire qu'une pointe recourbées est le résultat d'un manque d'eau est une autre manière de dire qu'elle manque de calcium.

En observant les pointes des concombres, on peut facilement voir si la plante a assez d'énergie pour former plusieurs fruits sur chaque nœud et pour continuer à en former d'autres sur les noeuds suivants.

Traduit de l'anglais par Ulrich Schreier, Ecodyn

*Lien Internet de cet article :*

[http://vernoux.org/agriculture\\_regenerative/Kempf-Des\\_pointes\\_recourbees\\_indiquent\\_une\\_carence\\_en\\_calcium.pdf](http://vernoux.org/agriculture_regenerative/Kempf-Des_pointes_recourbees_indiquent_une_carence_en_calcium.pdf)



## Original

### Bent growing tips as indicator of calcium deficiency

John Kempf June 29, 2020

The tips of growing vines should be vertical and point almost straight upward, particularly in the morning. During the day, in high-temperature conditions, they might move to a slight angle, but should still be mostly upright.

When a growing tip is bent over sideways, as this one is, it is an indicator of a calcium deficiency. It can also be an expression of dry soils and not enough water. Since the plant needs to absorb calcium from the roots each 24-hour photoperiod, which is then transferred through the xylem directly to the new growth, saying that a bent tip is the result of not enough water is just a different way of saying that it doesn't have enough calcium.

Observing the growing tips on cucumber vines is an easy assessment that can indicate whether the plant has enough energy to fill multiple fruit on each node and continue setting new fruit. As soil mineral balance and microbial populations improve, the domesticated crops we seek to grow become healthier, and the pioneering plants we often refer to as weeds become less healthy.

Different plants thrive in soils with different microbial profiles and different mineral profiles. The soils which are optimally balanced for our domesticated crops are not optimally balanced for the pioneering plants we call weeds.

When the crop becomes healthier than the weeds, diseases begin infecting the weeds and leave the crop alone.

Here is pigweed on the edge of a disease-free tomato field in 2006. I don't know what this organism is. I do know the plants only survived a few weeks more, and the tomato crop remained disease-free.

A question for you: Should the organism that is causing this infection be called a 'pathogen' or a 'pest'? Or does that label only apply when they infect our crop plants?

[Link](#)

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