



Symptoms of potassium deficiency in apple trees

Potassium deficiency is commonly noted in most deciduous fruit trees by curling up of the leaves' margins, which is also ubiquitous in drought situation. This symptom may be linked to the fact that potassium shortage may interfere with the closure of the stomata and reduce their dehydration control of the plant. Another typical symptom of K deficiency is leaves' chlorosis and necrosis. Since the potassium cation (K^+) is rather mobile in both the xylem and the phloem transport systems of the plant, and since the plant is programmed to prefer the development of young tissues, the tendency in most plants is to extract the K from the old organs and tissues, and to pass it to the newer ones. This is the reason for the general phenomenon that K deficiency shows up firstly on the older and more mature foliage of the plant. New shoots may be underdeveloped in affected trees. Fruits may not fully develop size-wise, and color-wise, also, their shelf life may be reduced.





