

## WINTER INJURY SHOWING UP ON LOCAL LANDSCAPE PLANTS

Winter injury has been showing up even before extremely hot weather has stressed the plants. Symptoms of winter injury showing up include:

- Chlorosis where green leaves turn yellow between veins; purple or red leaves turn green and/or “bleaching” between the veins
- Yellowing and dropping of older leaves, especially on the spurs of fruit trees
- Die-back of the shrub/tree from the branch tips/top back.

The results of winter injury can sometimes take months or years to appear. Sometimes the leaves can live on their reserves until they are depleted. This occurs slowly in cool weather or rapidly when the weather becomes suddenly hot. We have been experiencing relatively moderate weather that has yet to significantly stress the plants. As the growing season lengthens, we are seeing more and more indications of winter injury.

Root systems, especially shallow ones, may have been injured by cold winter temperatures. The damaged root systems fail to function adequately and the plant can't take up adequate amounts of nutrients and water, leaves at the top of the plant may show symptoms of chlorosis and the top of the plant may thin and die back.

Cold temperatures may also have injured the tissue in stems and trunks, especially the cambium. Twig or branch death may have occurred even though the leaves initially looked healthy this spring. When the stem conducting tissue has been seriously injured, the leaves will discolor and fall. A cut into the branch through the bark reveals discolored tissue, especially in fruiting spurs and twig tips.

For more information refer to the bulletin on Winter Injury of Landscape Plants.

**Please note:** There can be other causes of chlorosis and die-back. These include:

- Over-watering/Under-watering
- Root Problems - girdling roots, change of grade, soil compaction, transplant stress
- Soil Problems - high alkalinity, high salts

These should be considered along with the possibility of winter injury.

### **What can we do with these plants now?**

The important thing is not to stress the plants. Make sure they get adequate amounts of water but don't drown them with too much water - they will be prone to root rot. Prune out dead wood as soon as possible. You may fertilize lightly but don't fertilize heavily and encourage lush growth that the roots and stem tissue will not be able to support.