

CMG GardenNotes #110

Homework: Ips and Mountain Pine Beetles

1. IPB Beetles

Reference: CSUCE Fact Sheet #5.558, ***Ips Beetles***

- a. What trees are at risk? Why are newly planted trees at risk?
Newly planted and under stress. Newly planted due to water stress imposed in planting
Root injury, construction stress
- b. What two factors have contributed to the current outbreak in Ips beetles in Colorado?
Drought and fresh cuts due to fire prevention pruning/thinning
- c. What are the general symptoms of Ips beetles?
Sawdust in bark crevices and around base
Dieback from top or single branches – reinfestation may fill in tree
Woodpeckers feeding on trees indicate borers
- d. How can you tell if the beetles have moved on (to another part of the tree or other trees)?
Small round exit holes peppering the limb/trunk
- e. What does the presence of woodpeckers indicate? What are the symptoms of woodpecker feeding?
Borers (IPS, MPB, etc.)
Ragged holes and patches of missing bark
- f. To reduce Ips beetles, how should “slash” from pruning and thinning practices be treated?
Removed for area
Never stack green wood
Chipped or debarked
Scattered to dry rapidly
- g. When will Ips beetles adults fly?
Early spring (temps consistently in the 50-60s, could be as early as late February) to November
- h. Why would a preventively-sprayed tree later die from beetle attack?
 1. Attacked before sprays applied
 2. Too dilute (borer spray at heavier concentration than foliar insects)
 3. Incomplete coverage (must cover all the bark)
 4. Materials wore off
- i. What is the rule of thumb for considering if a tree is at risk and should have a preventative spray?
If infected trees are within view of healthy trees
High value trees

2. Mountain Pine Beetles

Reference: CSUCE Fact Sheet #5.528,
Mountain Pine Beetles

a. What trees are at risk for MPB attack?

Trees under stress
In outbreaks, healthy trees adjacent to
killed trees

b. What should be done for infested trees?

No treatment – tree will die

c. How should infested logs be treated?

Burned before emergence (early July)
Debarked
Chipped
Buried 8" deep
Solar treatment

3. Ips Beetle or Mountain Pine Beetle

In the following table, describe differences
between Ips beetles from MPB.

	IPS Beetles	MPB
Description – how to tell adults apart?	Wings curves with spines	Wings curve smooth
Kills entire tree or limb by limb?	Limb by limb or entire tree	Entire tree
Since both generate sawdust, how can you tell damage apart?	Boring dust in bark crevices and around base of tree	Popcorn- shaped resin or "pitch tubes" Boring dust in bark crevices and on ground
How to tell galleries apart	Clear	filled
Generations per year	2-4	1
Emergence time	Early spring (daytime temps consistently reach 50-60° into November)	Early July through September
Spray time	Early spring and mid summer	Early summer (July)