



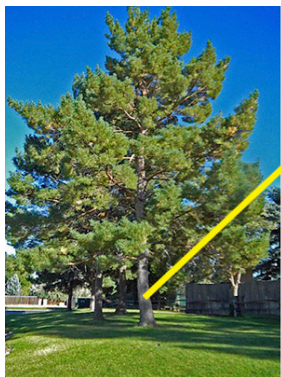
Mountain Pine vs. IPS Engraver Beetle

Swingle is responding to a new threat affecting pine trees along Colorado's front-range. Ips engraver beetles have been in Front Range pines for many years and in spruce trees since 1990. In August 2008, the mountain pine beetle escaped its familiar mountain environment and began infesting select Scotch pine trees in Northern Colorado, most of which resided in the Fort Collins to Greeley corridor.

New Developments:

In August of 2010, circumstances changed. The mountain pine beetle is now infesting pines in the Denver metro area at a much higher rate, especially from Denver to Castle Rock.

Our immediate focus NOW is on mountain pine beetle prevention for pine trees. Thus far, Austrian pines show low susceptibility to mountain pine beetle.



While mountain pine beetle is taking center stage, it is important to remember that the Ips beetle has not gone away and treatment for this pest is still needed.

Picture of Scotch pine recently attacked by mountain pine beetle.

Mountain Pine vs. Ips Engraver Beetles:

Mountain pine infestations are different than Ips. Trees infested with Ips beetle will die. In a mountain pine beetle infestation, initial attacks may be fended off by "pitching" the beetles out of the tree.

"Pitched out" beetles do not lay eggs in the tree and drown in the resin. However, the tree cannot sustain this defense in consecutive years, which necessitates spraying. Trees that succumb to mountain pine beetle will decline in the spring following the infestation. Thus, trees with current infestations may not need to be removed now.

New Recommendations:

To control bark beetles, sprays should be applied prior to the adult beetle flight preventing the beetle from entering new trees. While it is ideal to spray before the insect flight period, new treatment recommendations can be made and spraying does continue through the insect flight period.

Mountain pine beetle - All ponderosa, Scotch, foxtail, and pinyon pines should be treated annually to prevent mountain pine beetle attacks, ideally by July 1st. This treatment will include the highest

label rate possible of five quarts permethrin insecticide per 100 gallons of water.

Ips engraver beetles

- Under the mountain pine beetle control program, there is a period from April through early May where the trees will not not be protected. To protect the tree during this time period, we suggest a spring Ips treatment. Austrian pines (not covered by mountain pine beetle treatment) will continue with a one or two application program. For spruce, we recommend continuing with two applications as normal.

		Insect Activity											
		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Ips engraver beetle flights													
mountain pine beetle flights													
		Preventive Sprays											
		Ponderosa, Scotch, Foxtail & Pinyon Pines											
Mountain pine beetle spray												Summer - Newly Recommended	
Ips engraver beetle spray					Spring Recommended								
		Spruce											
Ips engraver beetle sprays					Spring Recommended							Summer Recommended	
		Austrian pines											
Ips engraver beetle sprays					Spring Recommended							Summer Recommended	

Watering - To maintain pine tree defenses, pines and spruce should receive adequate moisture throughout the year. In situations where this is not occurring, Swingle provides supplemental (ReCharge TM) watering services. These watering recommendations will be made as needed on a case by case basis.

Challenges of Bark Beetle Controls:

To protect your tree, the entire tree trunk must be treated. This treatment requires a high-pressure spray application. While research continues on alternative treatment strategies including soil injections, trunk injections, and repellants, results on these alternative treatments are inconclusive. Thus, Swingle's position is that the best treatment method available is spraying.

It is also our goal to use the least environmentally intrusive insecticide possible to protect your trees. We have chosen insecticides with the active ingredient permethrin. Permethrin is a widely used product with applications in veterinary medicine, human medicine, interior pest control and agriculture to control insects on fruits and vegetables. It should be noted that insecticide label restrictions preclude us from spraying near any water features.

In Closing:

Bark beetle infestations have been escalating along the Colorado Front-Range. Hence, Swingle is making the recommendation to spray all of your pines for mountain pine beetle, which will also offer protection for summer (late season) Ips engraver beetles. While spraying your trees offers a high degree of protection, it is not a 100% guarantee depending on the severity of beetle infestation.

I recommend a preventative treatment for Mountain Pine Beetle to protect your pine trees this year. Call me today to authorize this service or discuss the recommendation.

