PENTRA-BARK®SURFACTANT

The Only University Tested And Proven Bark Penetrating Surfactant

* ***Easy Effective application***
* ***No drift or chemical trespass***
* ***Proven effective with Fungicides - Insecticides***
* ***Large tank truck sprayers not needed***

Effectiveness of Non-Invasive Applications of Imidacloprid and Dinotefuron for Control of Emerald Ash Borer

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Adult Emerad Ash Borer

Objective

We evaluated a non-invasive, efficient & simple method of applying imidacloprid or dinotefuron to the trunk of ash shade trees. This application method involves mixing the insecticide with Pentra- Bark®, a non-toxic, bark-penetrating surfactant (Quest Products, Linwood KS)

The formulated solution is applied directly to the bark on the lower trunk of the tree with a common garden sprayer. In our study, we sprayed the circumference of the tree trunk, from 20 cm to 1.6 m aboveground, until the bark was wet.

Conclusions

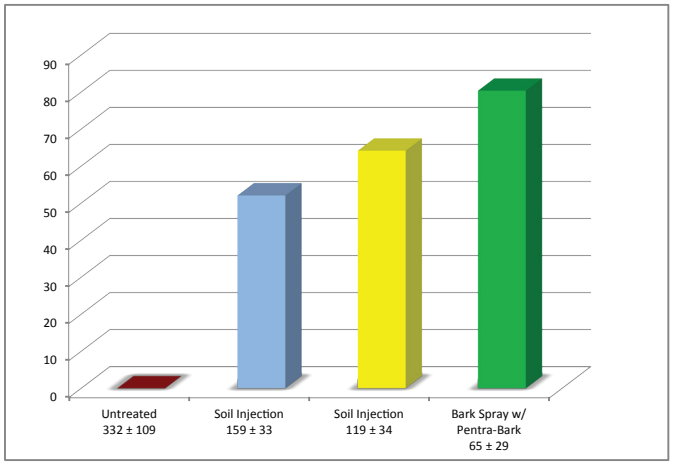
Residue, bioassay & larval data show than non-invasive trunk sprays with Pentra-Bark effectively carried imidacloprid & dinotefuron through bark & into xylem for translocation to foliage. This simple, efficient method of applying imidacloprid or dinotefuron may provide a new option for protection of ash shade trees from EAB.

"Safari, ***particularly the application with Pentra-Bark,*** provided significant control of calico scale nymphs on the leaves, which should translate to fewer honeydew-producing adults next spring."

Table 1. Efficacy of Safari 20 SG for systemic control of calico scale on mature *Zelkova serrata* trees in the landscape, 2007.

Treatment	Treatment Date	All Trees Included		Atypical Untreated Tree with Low Infestation Excluded	
		Live Scales per Sample	% Control	Live Scales per Sample	% Control
Untreated	-	332 ± 109		417 ± 96	
Soil injection	18 April	159 ± 33	52.1	159 ± 33*	61.9
Soil injection	15 May	119 ± 34*	64.2	119 ± 34*	71.5
Bark spray with Pentra-Bark	18 April	65 ± 29*	80.4	65 ± 29*	84.4

ANOVA results: for all trees; $F = 3.56$; df = 3, 12; $P < 0.05$; with atypical control tree excluded; $F = 9.41$; df = 3, 11; $P < 0.005$. Asterisk denotes mean is significantly lower than mean for untreated trees (Dunnett's test, $P < 0.05$).



"If Dinotefuron with Pentra-Bark works consistently as well as it did in this trial, it could provide a valuable tool for managing scale insect infestations on horse farms, streets, landscape settings, and other sensitive sites where canopy sprays are impractical."

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