

Pitfall Trapping Trials for *Prionus laticollis* Using a Specific Pheromone Enantiomer



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Broadnecked Root Borer in Apple

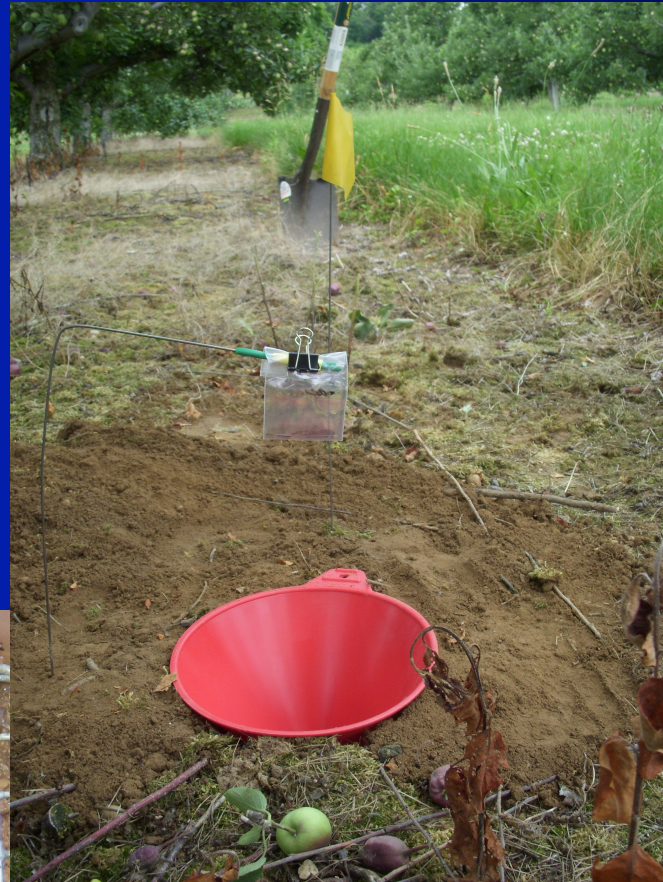
Prionus laticollis



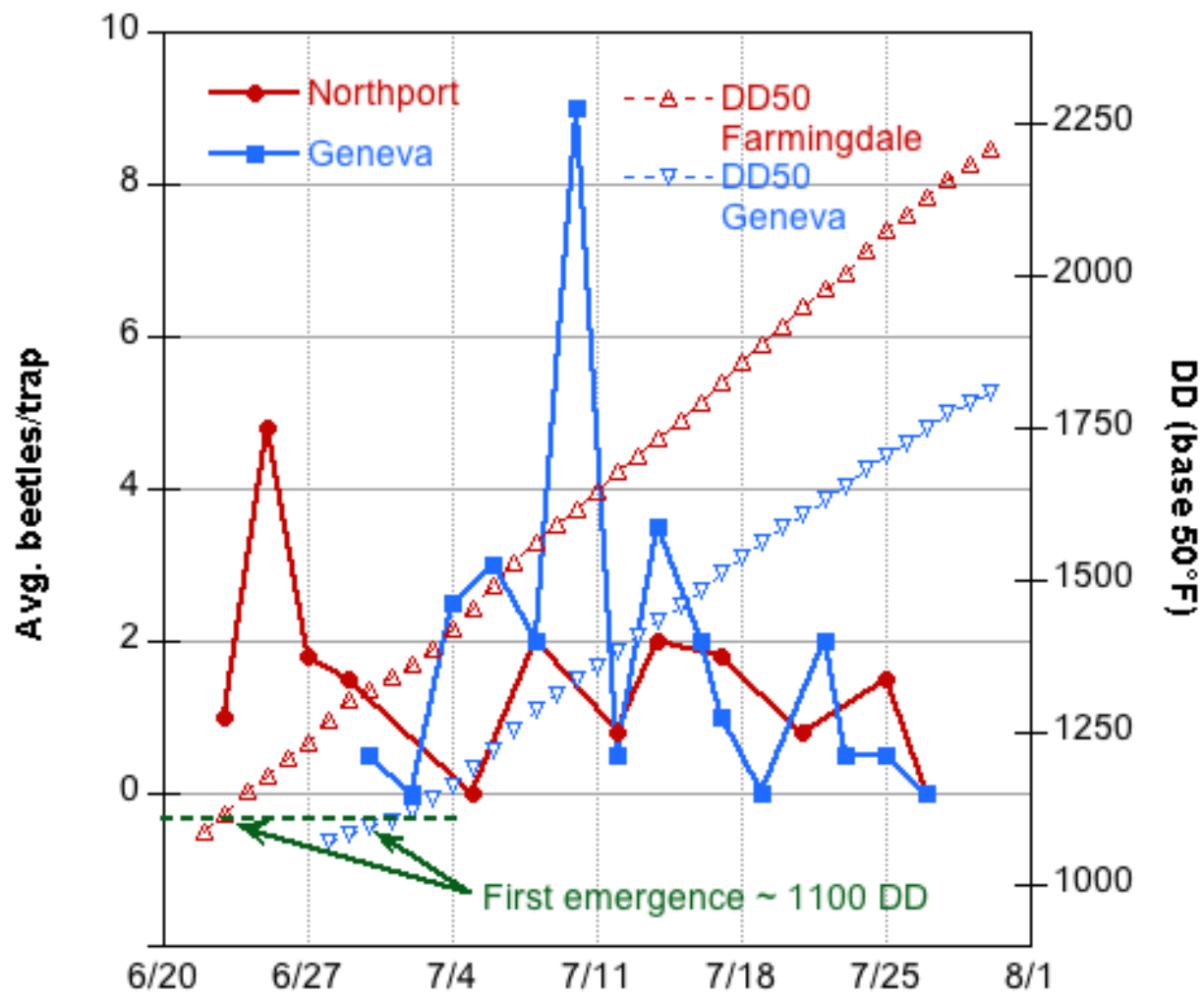
- One of largest N. Amer. longhorn beetles (3.5" length)
- Many hosts: oak, maple, willow, deciduous fruits
- Feeds on buttress roots and crowns, 3-4 yr devel.
- 1 gen/yr, adults emerge in July in NY
- Research on *Prionus* in CA & ID determined sex pheromone: 3,5-dimethyldodecanoic acid
- Very effective on *P. californicus* (pest of hops)
- Tested in NYS during 2010 season



Prionus laticollis



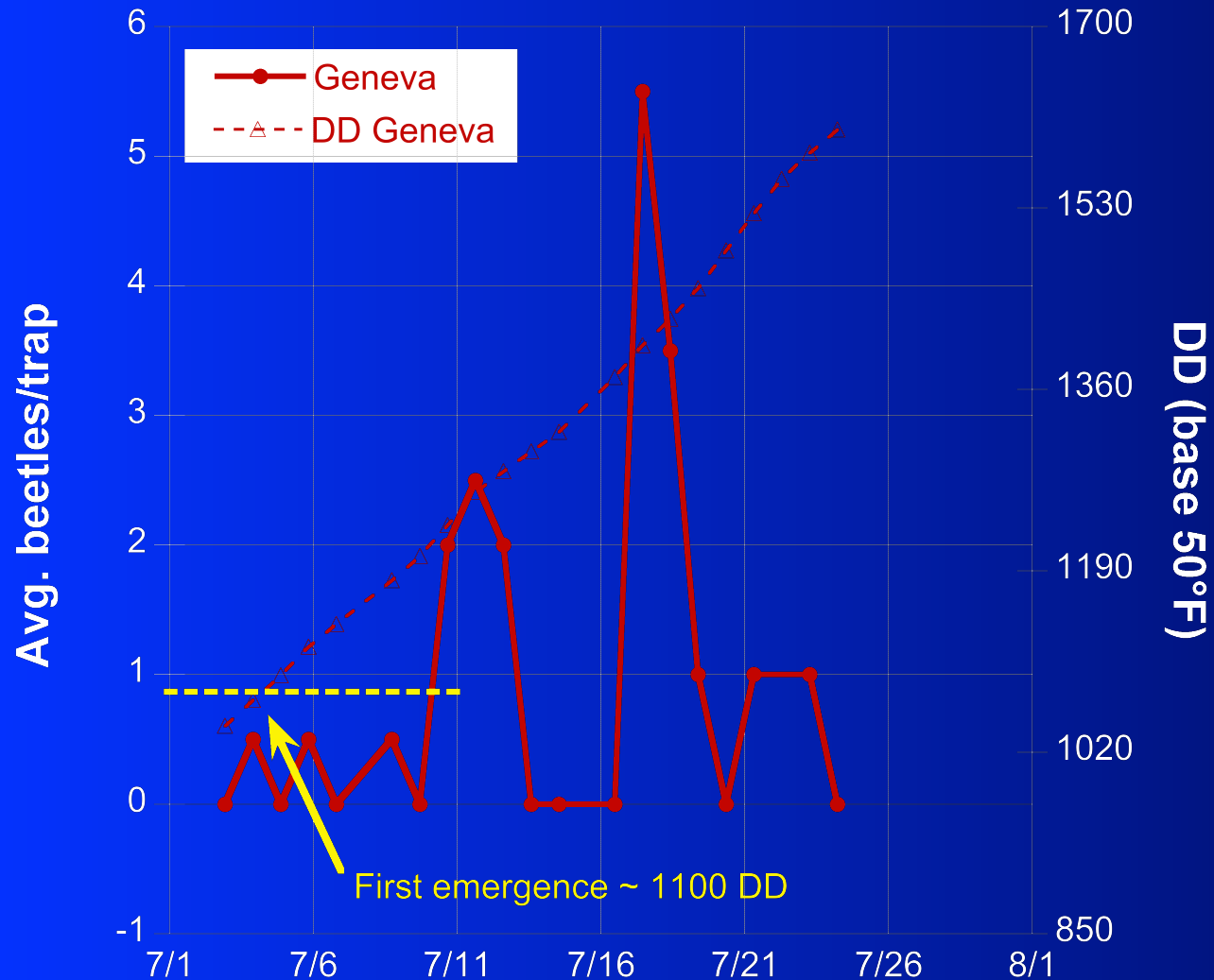
Prionus Pitfall Trap Captures, NY – 2010



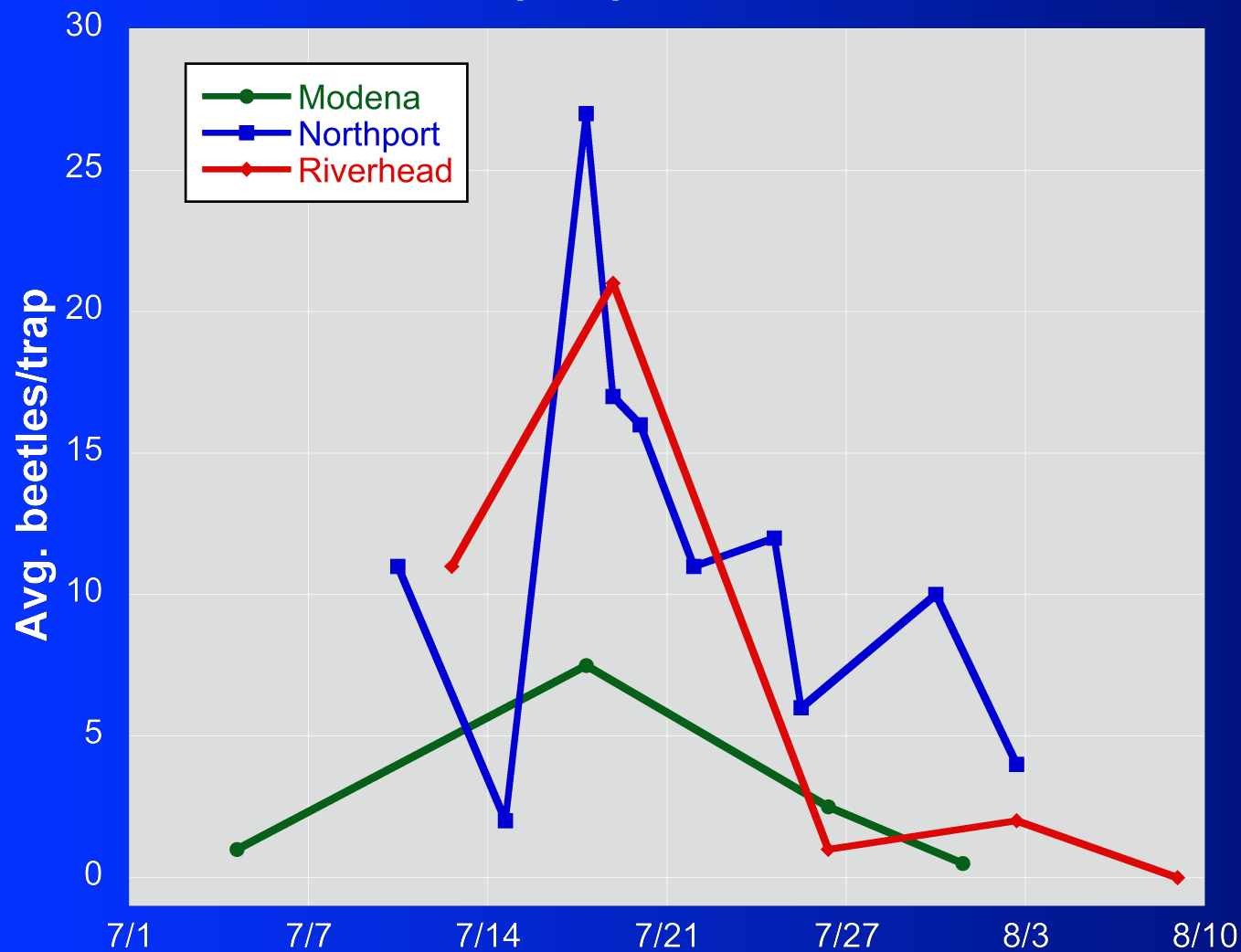
2011 Trapping Trials

- Further research found “Prionic Acid” to be mixture of several isomers; most active was: 3R,5S-dimethyldodecanoic acid (“3R enantiomer”)
- Regular Prionic Acid tested in Geneva, Modena, Northport and Riverhead, NY – commercial lures
- Prionic Acid compared against 3R enantiomer in Geneva

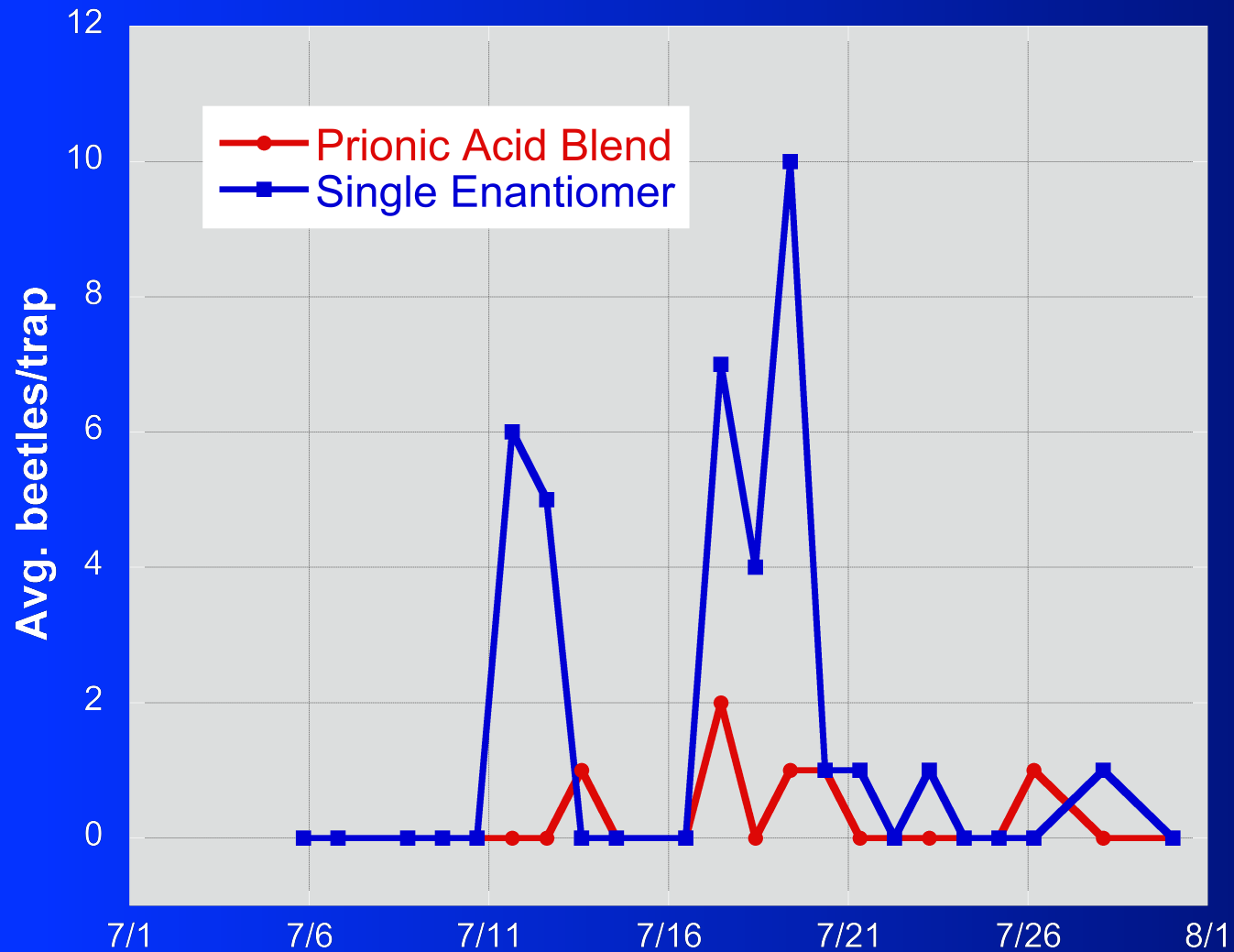
Prionus Pitfall Trap Captures, Geneva, NY – 2011 (Mixed Prionic Acid Blend)



Prionus Pitfall Trap Captures, Eastern NY – 2011



Prionus Pitfall Trap Captures Lure Trial, Geneva - 2011



Acknowledgments

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