

Updating Navel Orangeworm Sanitation Guidelines for Nonpareil almonds in Kern County

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Problem of Mummies



Search for Factors to Predict NOW Damage and Assess Sanitation Efficacy

- **Designed by Brad Higbee**
- **10-acre plots in all Paramount Ranches**
- **Dataset for 2003-2006 analyzed by me**
- **Part of a multiple regression and a multiple logistic regression analysis**
- **End Result: Interactive spreadsheets**

**Part of a new Areawide Program for
Control of Navel Orangeworm-See Poster**

2,596,008 kernels graded
19,200 acres and 15,360 trees

Impact on Kernel Damage

- **Tree Mummies**
- **Ground Mummies**
- **Proximity to Pistachios**
- ***Previous Year Damage**
- ***Harvest Date**
- ****Peach Twig Borer**

Correlations

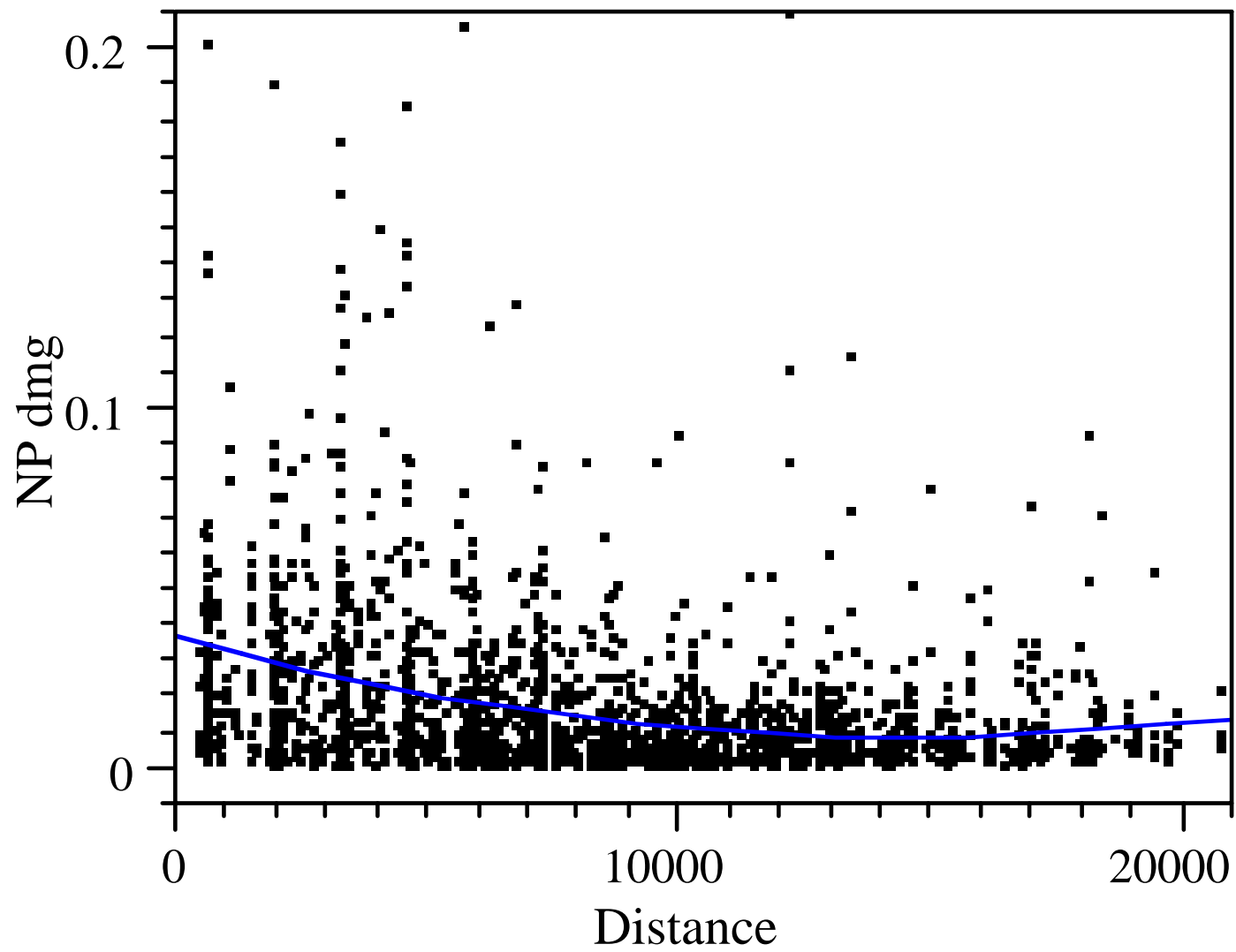
	NOW damage	Tree Mummies	Ground Mummies	Distance
NOW damage	1.00	0.46	0.23	-0.29
Tree Mummies	0.46	1.00	0.39	-0.09
Ground Mummies	0.23	0.39	1.00	-0.06
Distance	-0.29	-0.09	-0.06	1.00

Tree Mummies

Average Tree Mummies	Percent Damage	Plots
0	1.63	605
0.01 - 0.49	1.22	1,092
0.5 - 0.69	1.57	91
0.7 - 0.79	2.32	39
0.8 - 1.75	3.53	61
Greater than or equal to 1.76	7.85	44

Ground Mummies

Average Ground Mummies	Percent Damage	Plots
0 - 4.9	1.39	1,272
4.91 - 7.9	1.57	300
7.91 - 8.9	1.72	67
8.91 - 9.0	2.78	44
Greater than or equal to 9.81	2.72	238



Conclusions

- Tree mummy threshold as low as 0.2 per tree
- Ground mummy threshold as low as 4 per tree
- Pistachio Effect extends three miles