APPENDIX I • References Cited

Hanafi, A., E. B. Radcliffe, and D. W. Ragsdale. 1989. Spread and control of potato leafroll virus in Minnesota. Journal of Economic Entomology 82: 1201–1206.

Hills, T. M., and D. C. Peters. 1971. A method of evaluating postplanting insecticide treatments for control of western corn rootworm larvae. Journal of Economic Entomology 64: 764–765.

Oleson, J. D., Y. L. Park, T. M. Nowatzki, and J. J. Tollefson. 2005. Node-injury scale to evaluate root injury by corn rootworms (Coleoptera: Chrysomelidae). Journal of Economic Entomology 98: 1–8.

Node-Injury Scale (from Oleson et al. 2005)

0.0 No feeding damage

1.0 One node (circle of roots), or the equivalent of an entire node, pruned back to within approximately 3.8 cm (1.5 in) of the stalk (or soil line if roots originate from above ground nodes)

2.0 Two complete nodes pruned

3.0 Three or more complete nodes pruned (highest rating that can be given)

Damage in between complete nodes pruned is noted as the percentage of the node missing, e.g., 1.50 = 1½ nodes pruned.

For a complete explanation of the node-injury scale and a comparison with the Iowa State University 1-to-6 root rating scale (Hills and Peters 1971), visit the "Interactive Node-Injury Scale" Web site, http://www.ent.iastate.edu/pest/rootworm/nodeinjury/nodeinjury.html.

Cumulative Aphid Days (from Hanafi et al. 1989)

$$\sum_{i=d} a = \left(\frac{\bar{x}_d + \bar{x}_{d-1}}{2} \right) t$$

a = aphid days

$\bar{x}_d$ = mean number of aphids per plant from current sampling date

$\bar{x}_{d-1}$ = mean number of aphids per plant from previous sampling date

t = days between sampling