

 $Figure \ 1. \ Classic \ symptoms \ of \ Rhizomania. \ Wine \ glass \ shape; \ vascular \ system \ discoloration; hair \ root \ proliferation \ (crazy \ root).$ 



Figure 2. Leaf yellowing and hair root proliferation of Rhizomania sugarbeet.



Figure 3. Elongated petioles, narrow leaves and yellowing of Rhizomania sugarbeet.



 $\label{eq:Figure 4. Hair root proliferation (crazy root) caused by blocked vascular system of Rhizomania infected sugarbeet.$ 



Figure 5. Yellow areas of Rhizomania infection in field.



Figure 6. Yellow areas of Rhizomania infection in field.



Figure 7. Yellow Rhizomania areas showing up in aerial view.



Figure 8. Yellow Rhizomania areas in aerial view.



Figure 9. Variety differences in the Rhizomania strip trial.



Figure 10. Variety difference in Rhizomania Strip Trial field.



Figure 11. Variety difference in Rhizomania Strip Trial field.



Figure 12. Aerial view of variety differences with Rhizomania.



Figure 13. Aerial view of variety differences with Rhizomania.



Figure 14. Aerial view of yellowing in field due to Rhizomania infection.



Figure 15. Aerial view of variety differences with Rhizomania.



Figure 16. Root sprangling (90 degree turns) brown dry (dying) hair roots from Rhizomania infection.



Figure 17. Wine glass shape from constriction in vascular system; proliferation of hair roots caused by Rhizomania.



Figure~18.~Sprangling~and~root~constriction,~browning~(dying)~root~hairs~of~Rhizomania~infected~sugarbeet.



Figure 19. Sprangling of roots, root constriction, browning (dying) of hair roots due to Rhizomania.



Figure 20. Stunting, Browning (dying) root hairs due to Rhizomania.



Figure 21. Root constriction, enlargement of hair roots due to Rhizomania.



Figure 22. Root constriction, root sprangling ( 90 degree turns), hair root proliferation, enlarged hair roots due to Rhizomania.



Figure 23. Veinal yellowing and necrotic lesions from Rhizomania.



Figure~24.~Hair~root~proliferation.~enlarged~hair~roots, root~sprangling~(90~degree~turns)~and~root~constriction~due~to~Rhizomania.



Figure 25. Veinal yellowing on leaf and classic root symptoms of Rhizomania.