

Figure 3. Directed acyclic graph (DAG) from Bayesian network structure learning of the annual costs of fungicides applied to hop cultivars based on their susceptibility to R6-virulent-strains (left) or non-R6-virulent-strains of *Podosphaera macularis* (right). Red lines are edges in the whitelist that were always included in the network; black lines were learned during model fitting. Strength of the relationship is indicated by the width of the edge. Bold lines indicated a probability = 1, thin lines indicate probability between 0.85 and 1, and dashed lines indicate probability between the threshold and 0.85. Thresholds for an edge to appear are 0.51 for the network evaluating susceptibility to R6-virulent-strains and 0.57 for the network evaluating susceptibility to non-R6-virulent strains