

Figure S2. STRUCTURE analysis of twelve microsatellite loci for *Phytophthora infestans* in the United States. Results for K=2 to K=5 are shown. Each color represents one population defined by STRUCTURE. Each isolate is represented by a vertical bar, and the length of each colored segment in each vertical bar represents the proportion contributed by the ancestral population. The number of inferred populations based on the Δ*K* method according to Evanno et al. [32] was two. Groups one, two, and three on the x-axis represent an arbitrary classification of isolates into groups according to their occurrence over time in the United States. Group one contained lineages of *P. infestans* that have not been prevalent in the United States for the past 10 years (US-1, US-6, US-7, US-12, US-14, US-16, US-17, and US-19). Group two contained lineages of *P. infestans* that have been dominant in the past five years (US-8, US-11, US-22, US-23 and US-24) or that have been first described during the past five years in the United States (US-20 and US-21). Group three contained the NYS-2010/11 *P. infestans* isolates that are the focus of this study (GDT-01 to GDT-20).