

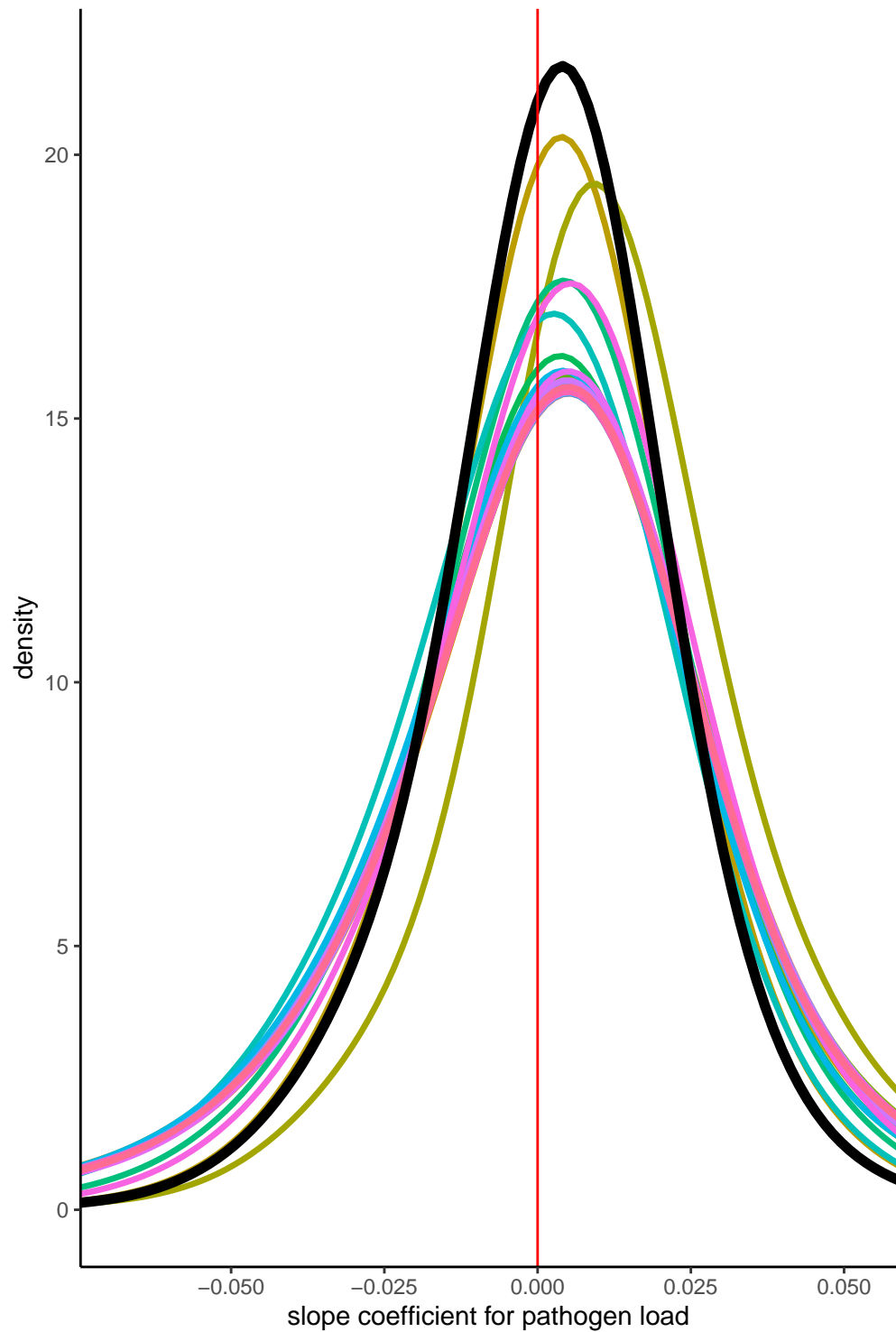
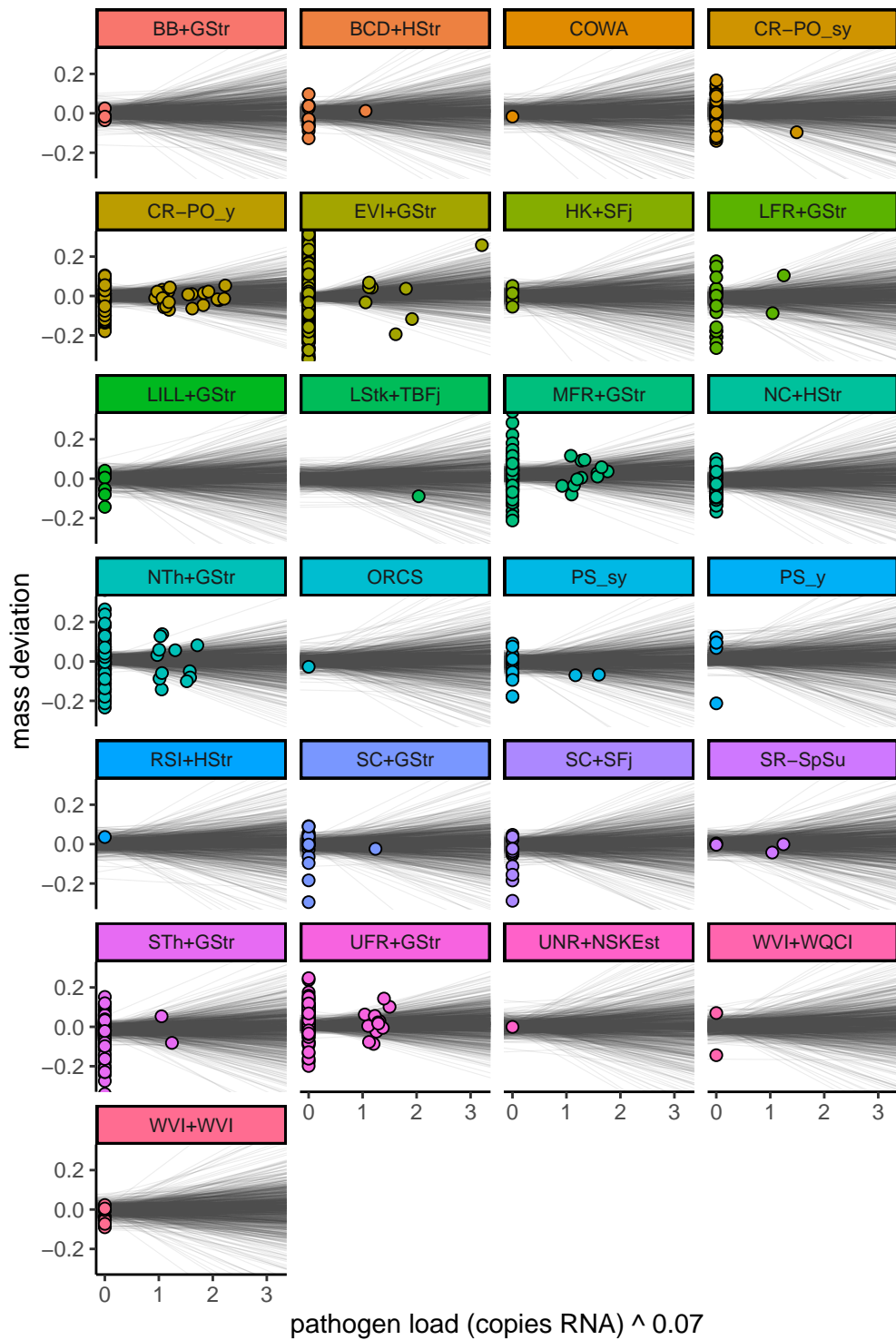
## **Supplementary Material 4: Chinook mass deviation model figures**

### **"Identification of infectious agents in early marine Chinook and Coho salmon associated with cohort survival"**

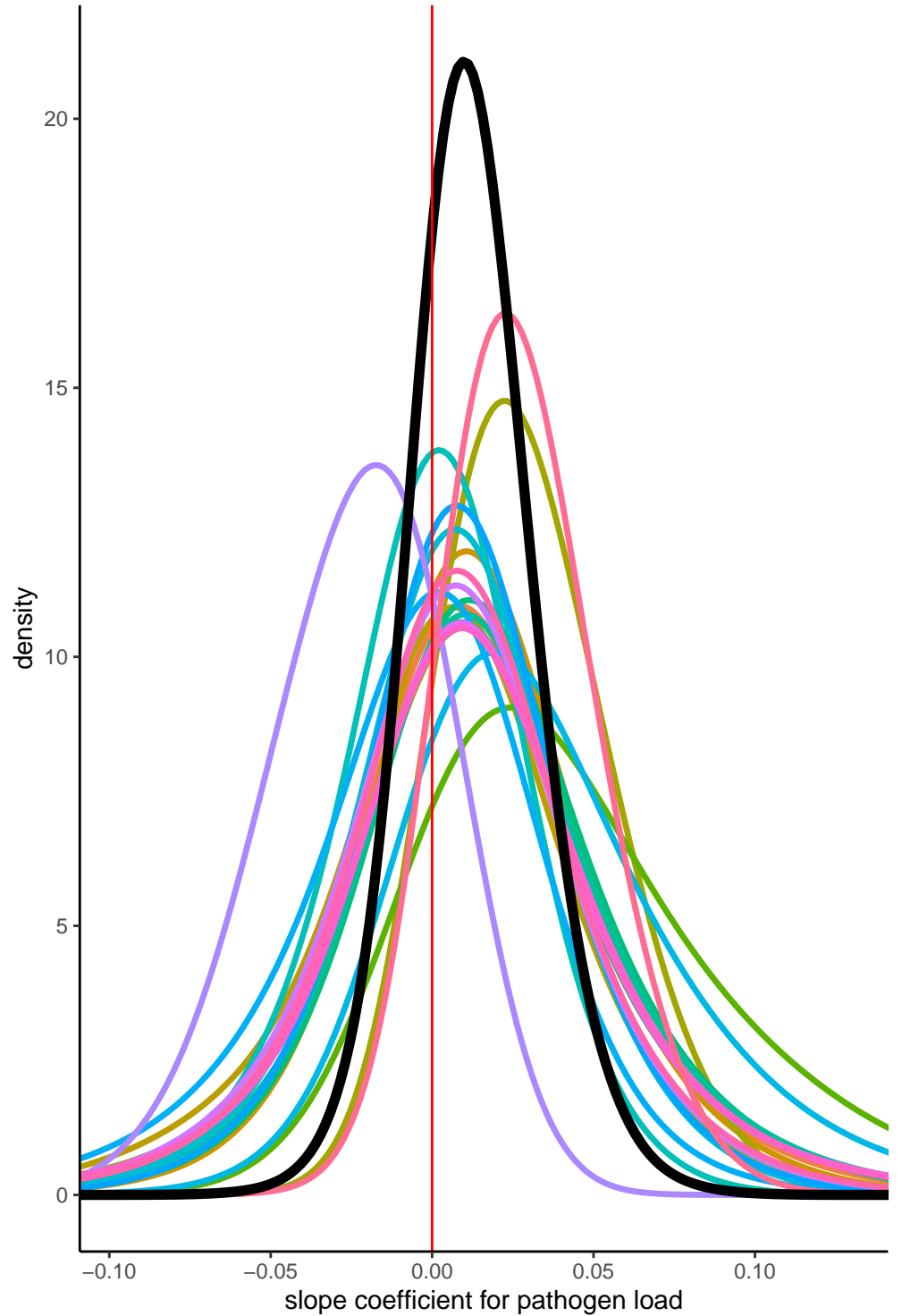
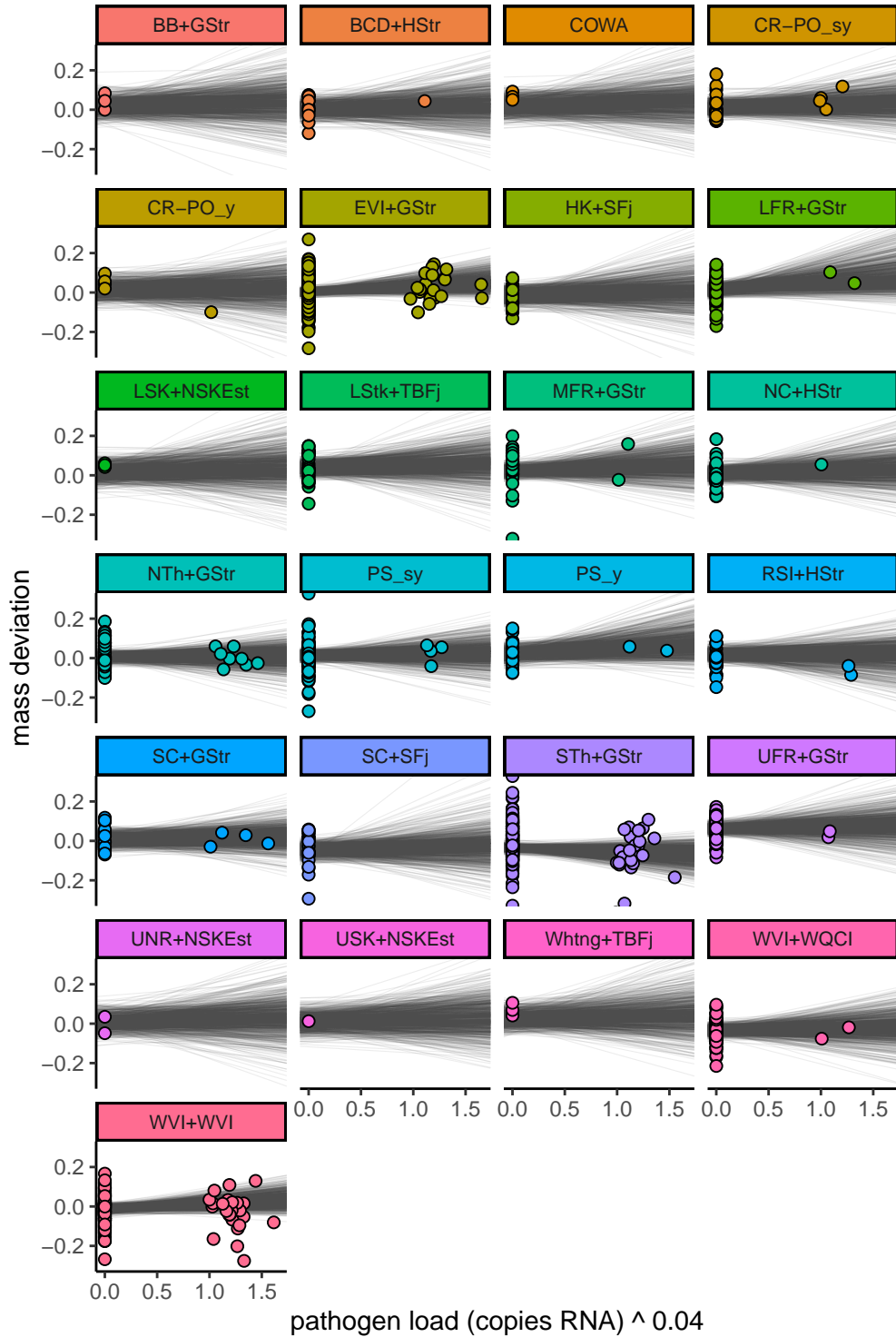
Arthur L. Bass, Andrew W. Bateman, Brendan M. Connors, Benjamin A. Staton, Eric B. Rondeau, Gideon J. Mordecai, Amy K. Teffer, Karia H. Kaukinen, Shaorong Li, Amy M. Tabata, David A. Patterson, Scott G. Hinch, Kristina M. Miller

**Description:** Bayesian multi-level model results from Chinook mass deviation models. Raw data (points) are presented in left panels and model results are presented in right panels (heavy black line indicates the posterior distribution of the hyperdistribution mean). Lines in left panels represent 1000 random draws from the posterior distributions of the stock-specific intercepts and slopes. Slope coefficient for the right panel is relative to a 2 SD increase in pathogen load.

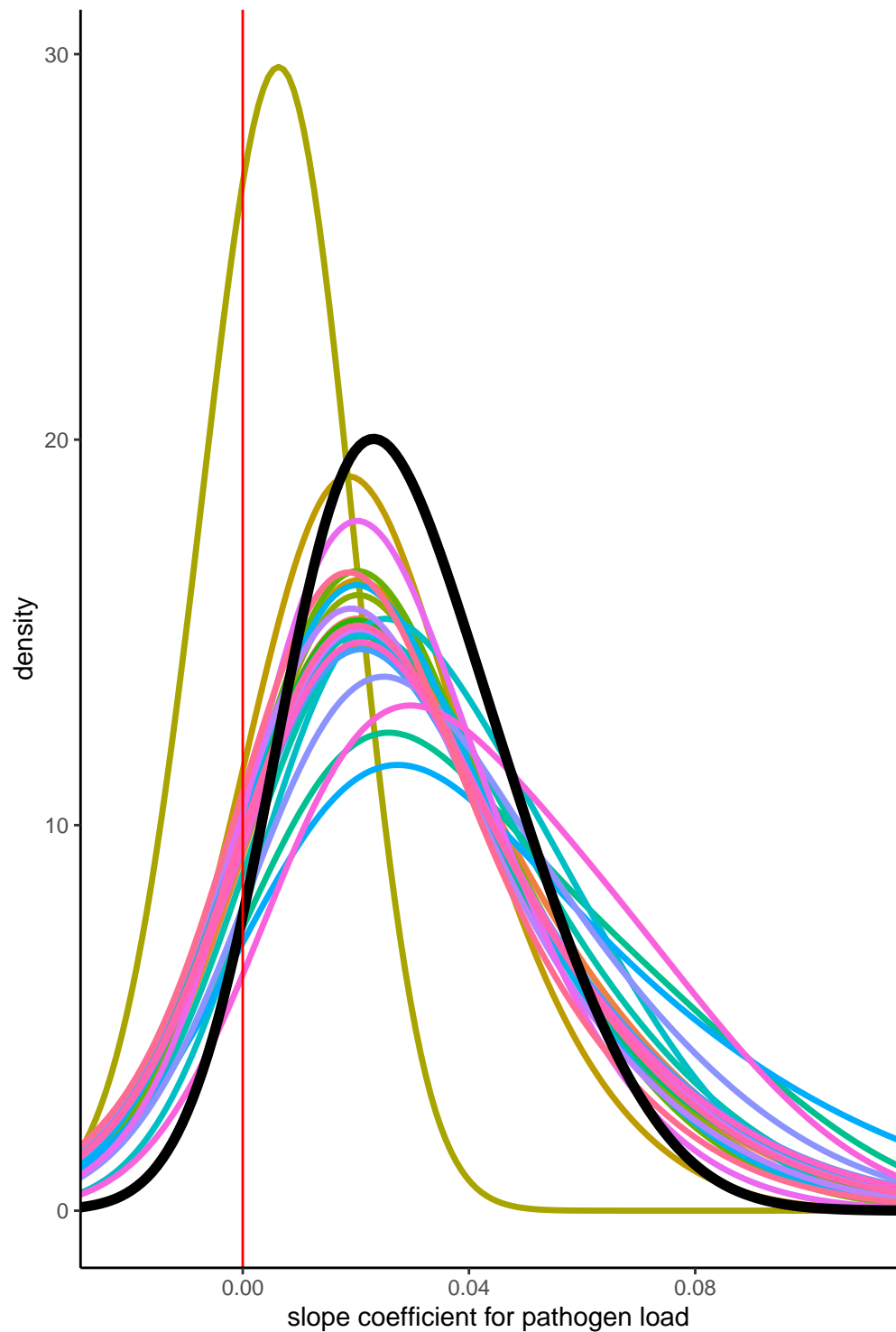
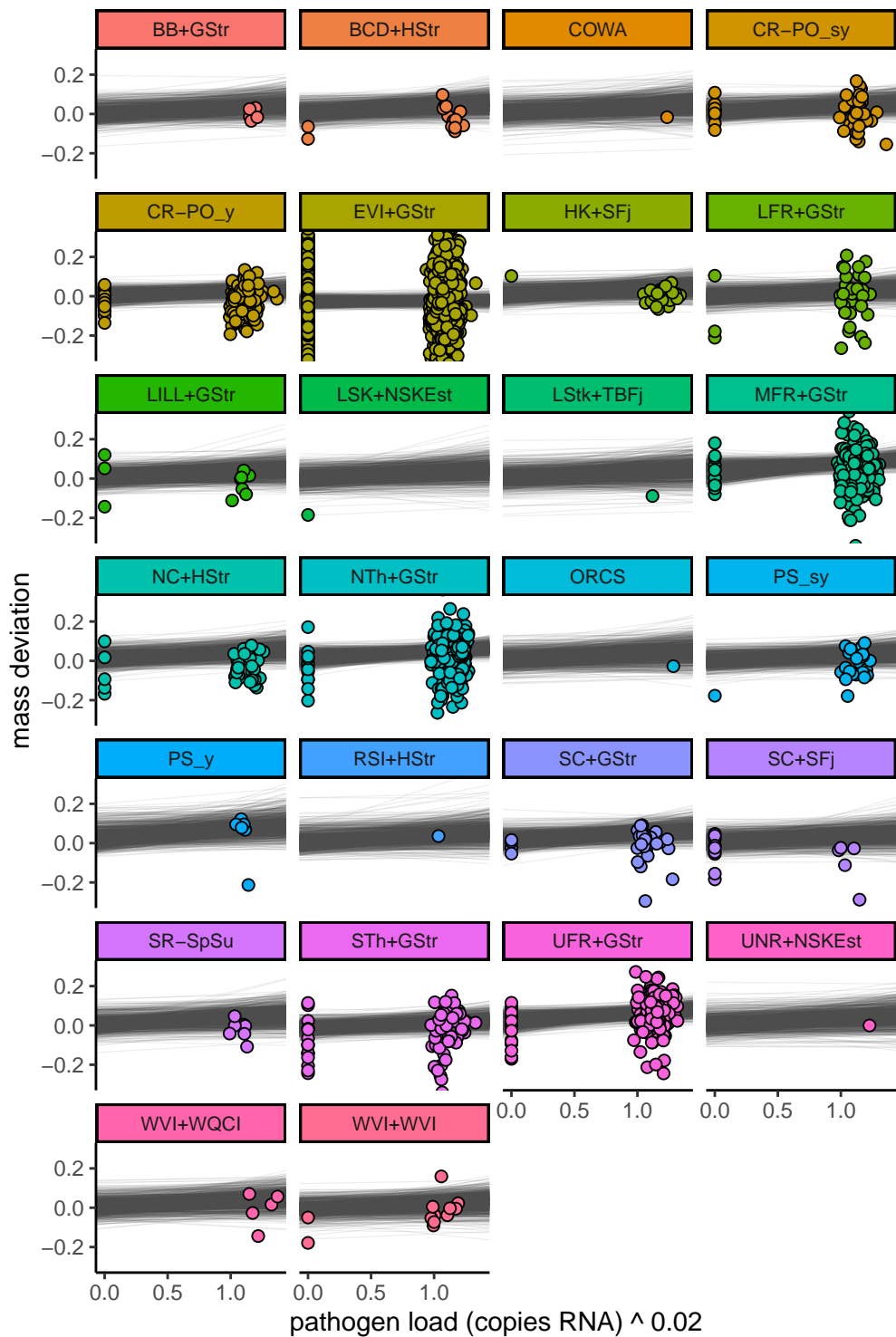
# Salmon Pescarenavirus 1 SpSu



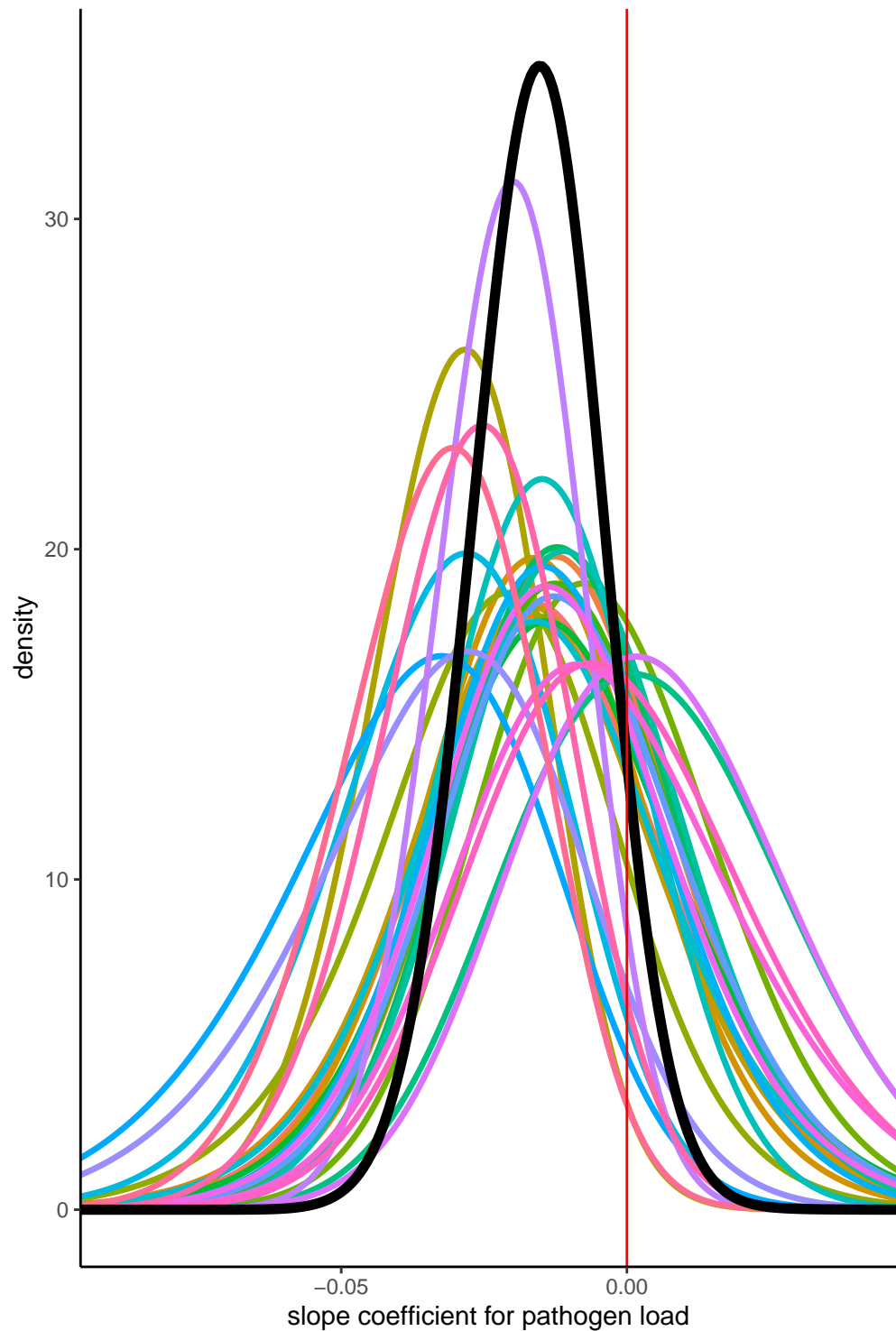
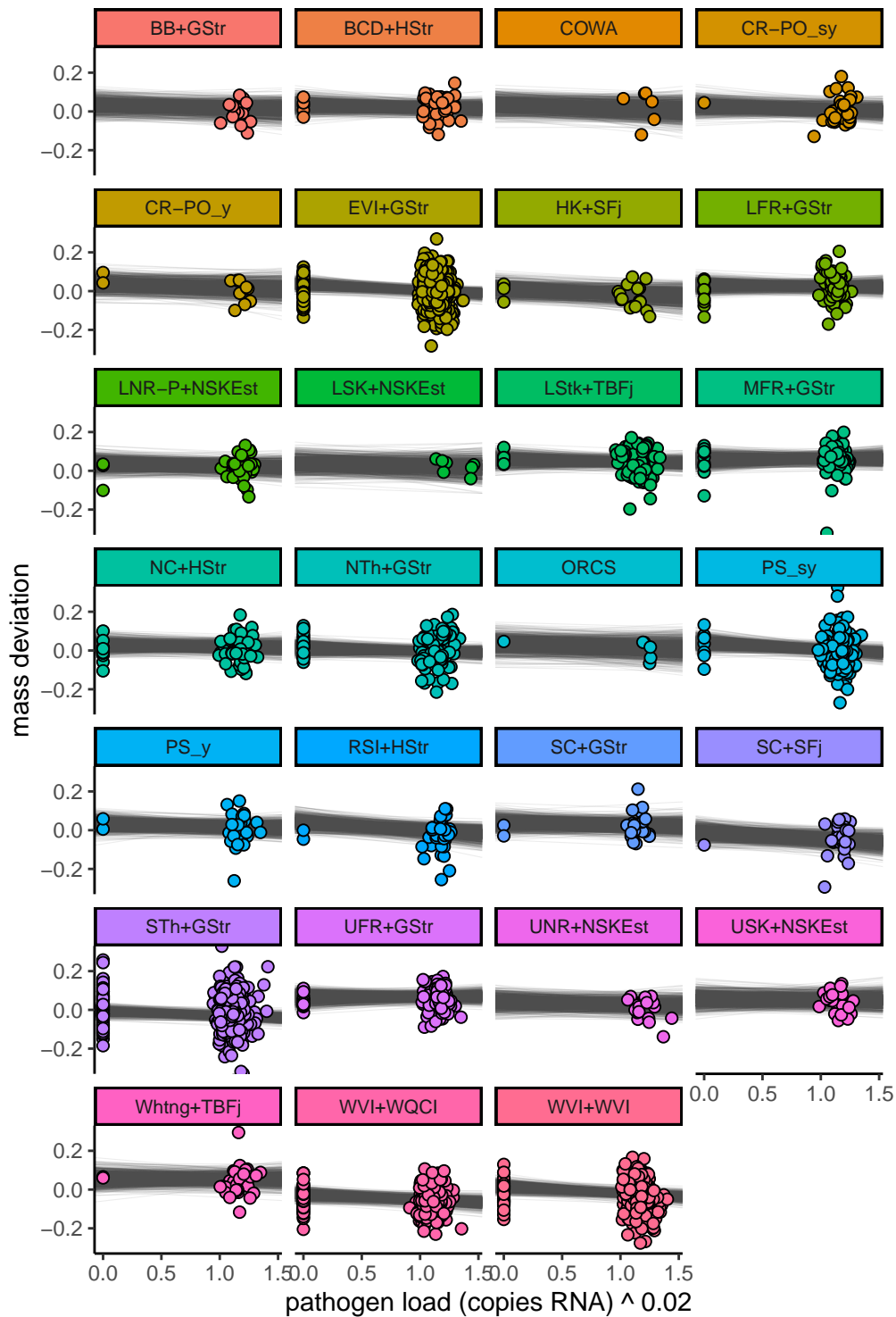
Salmon Pescarenavirus 1 FaWi



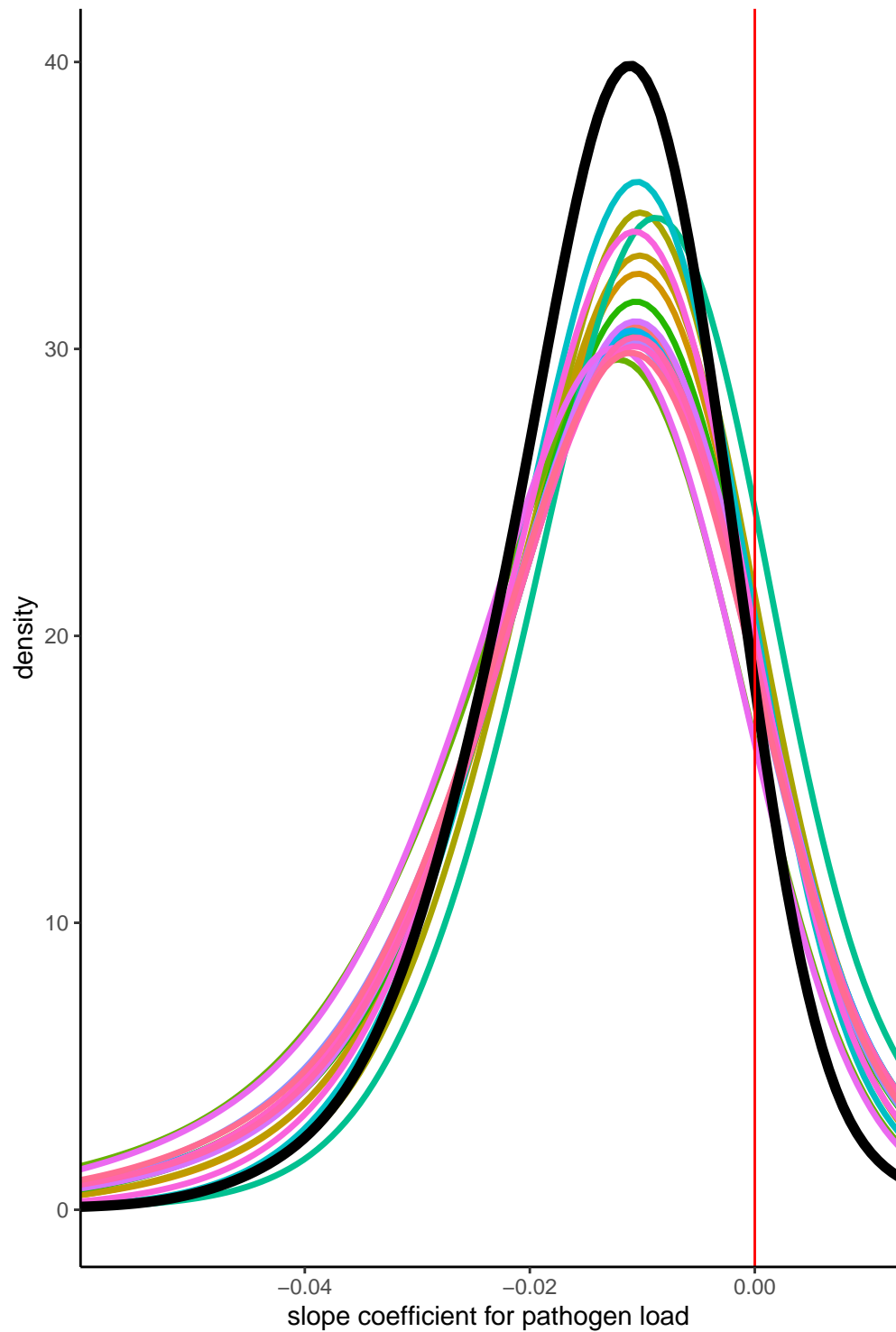
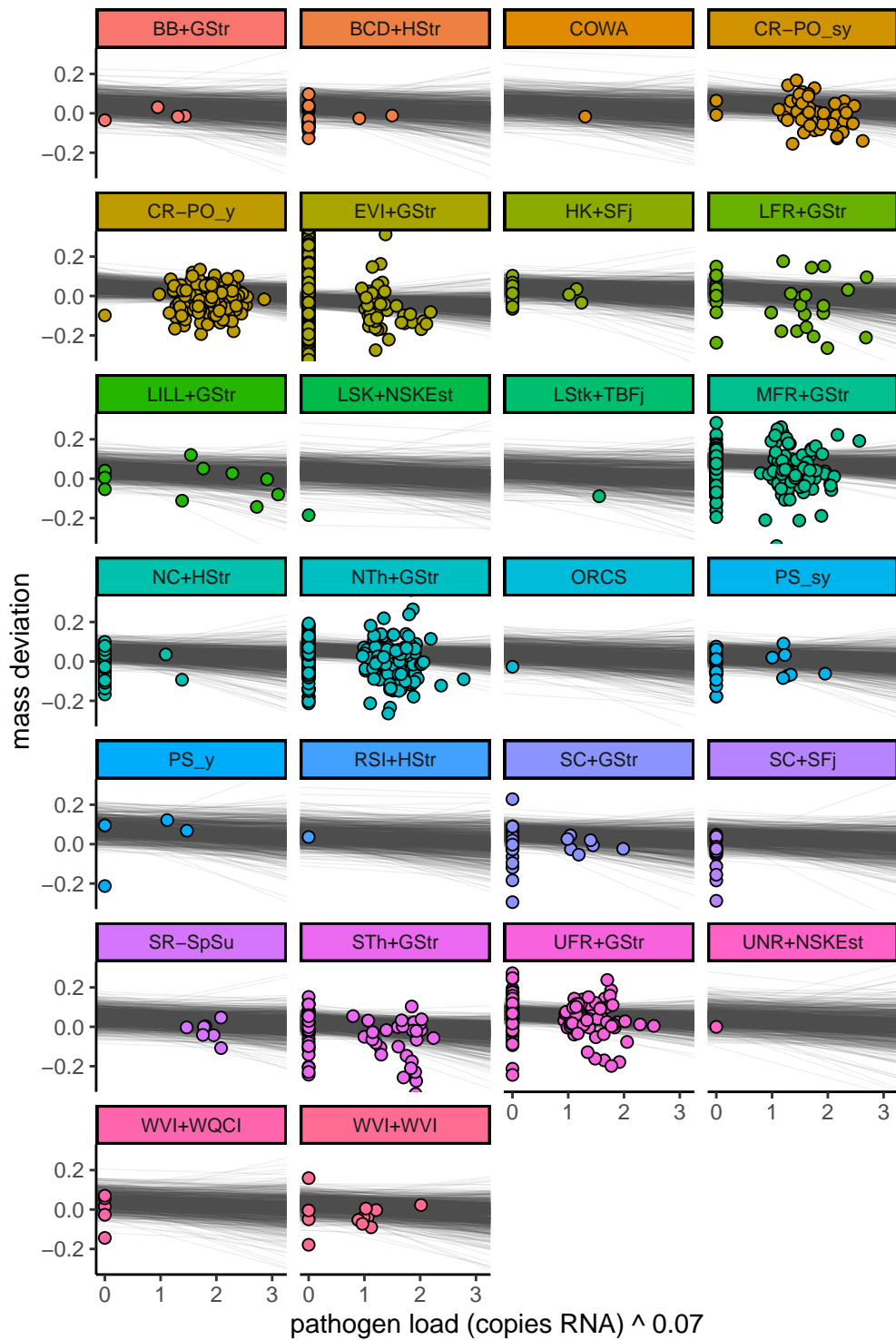
Candidatus Branchiomonas cysticola SpSu



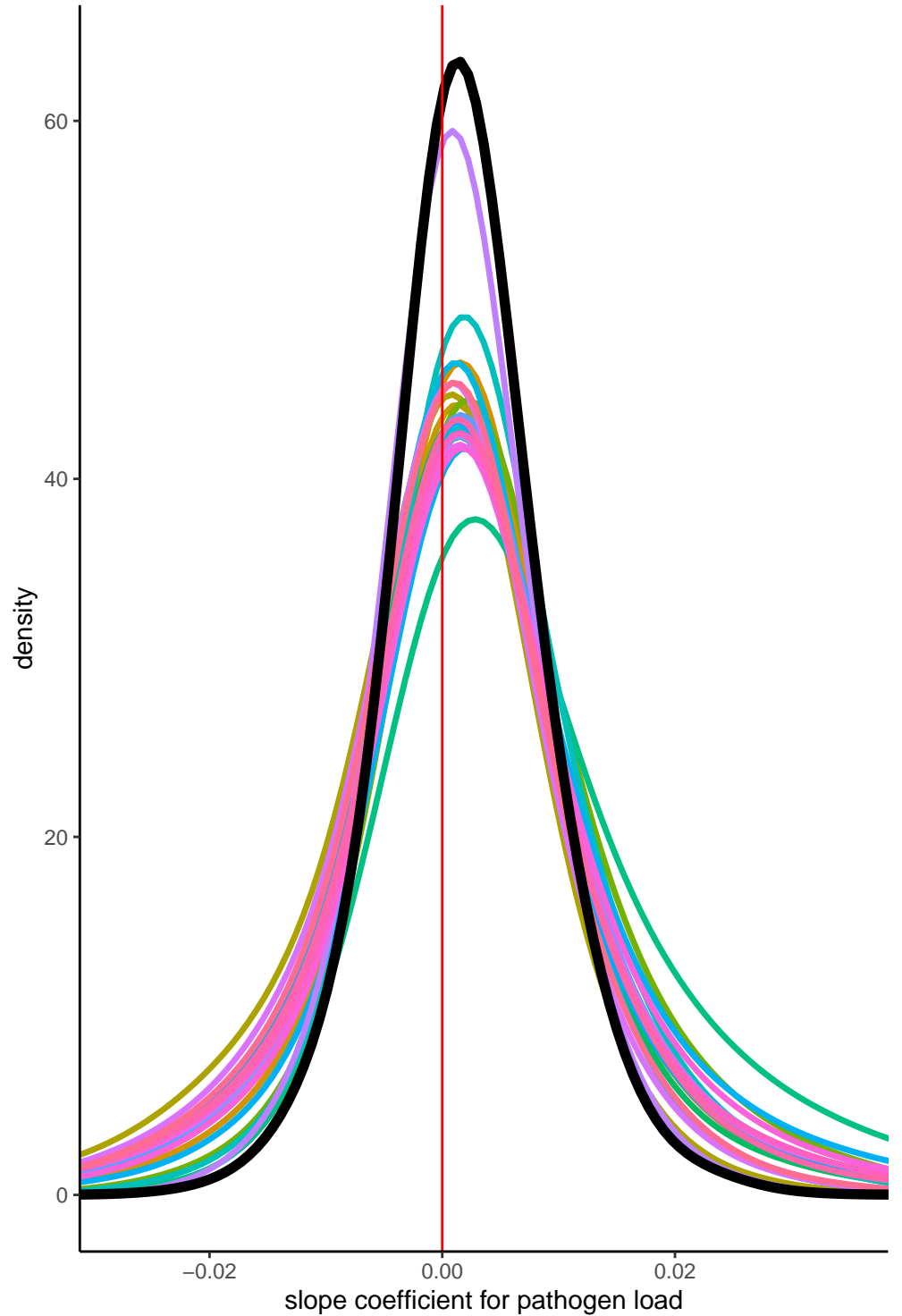
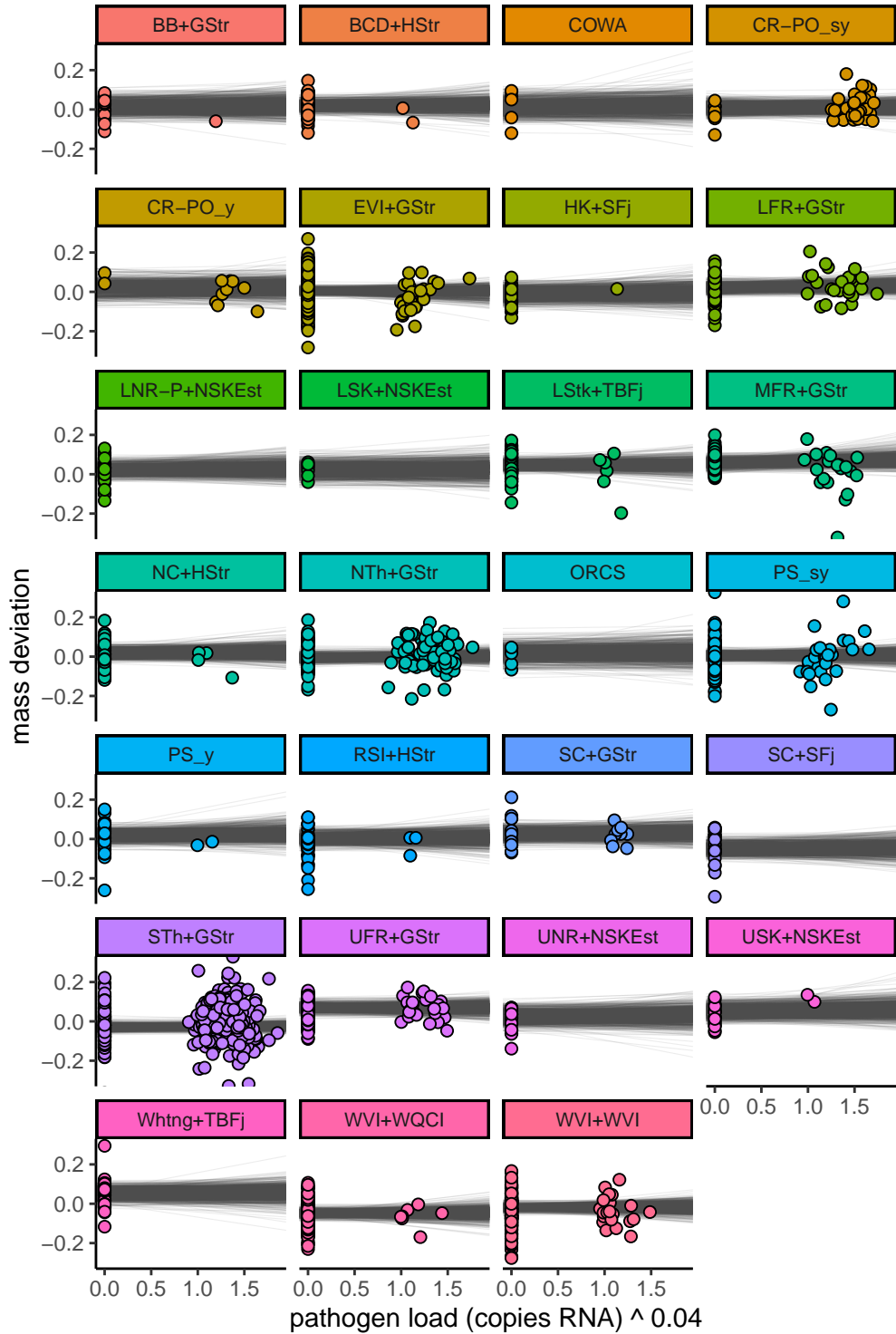
Candidatus Branchiomonas cysticola FaWi



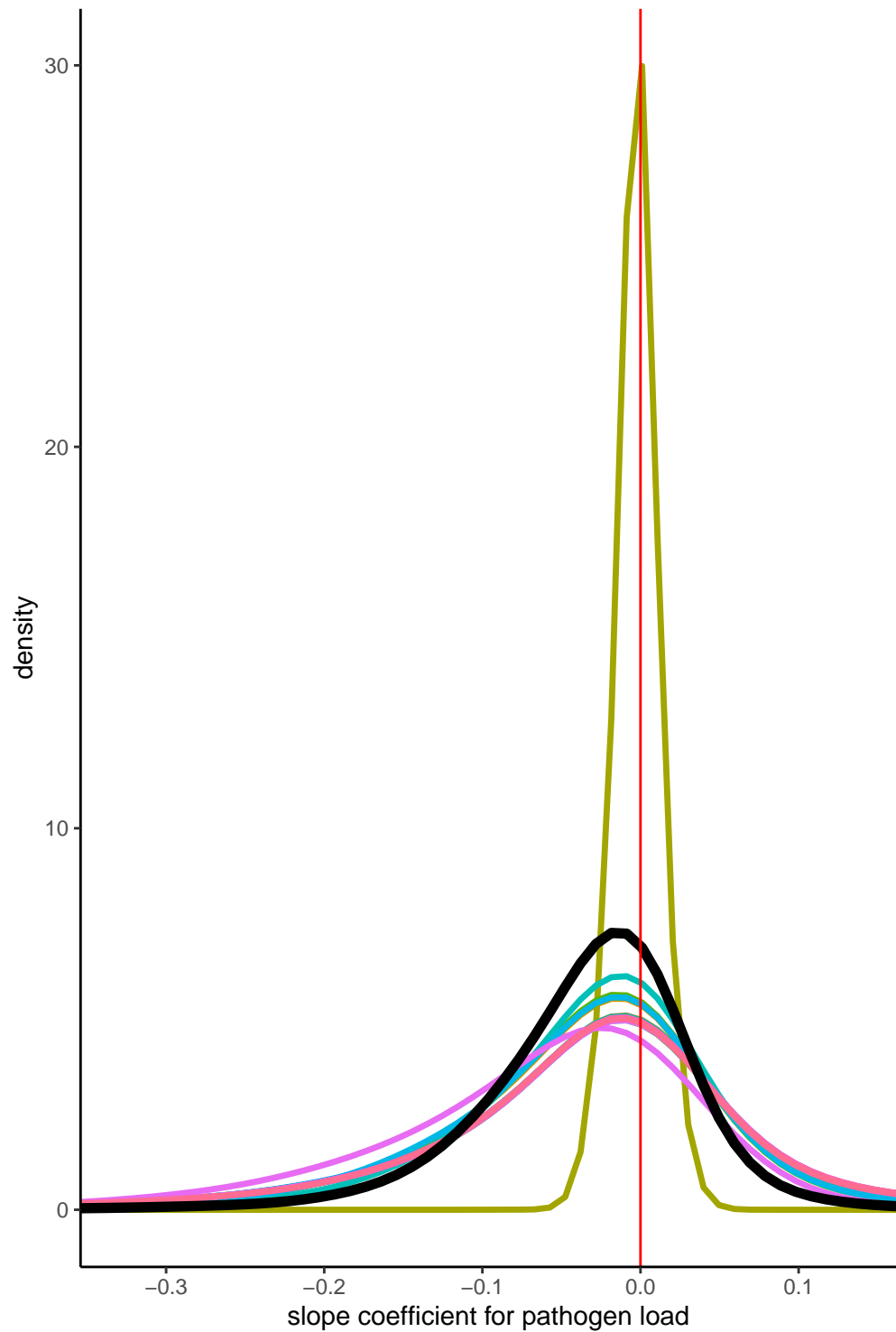
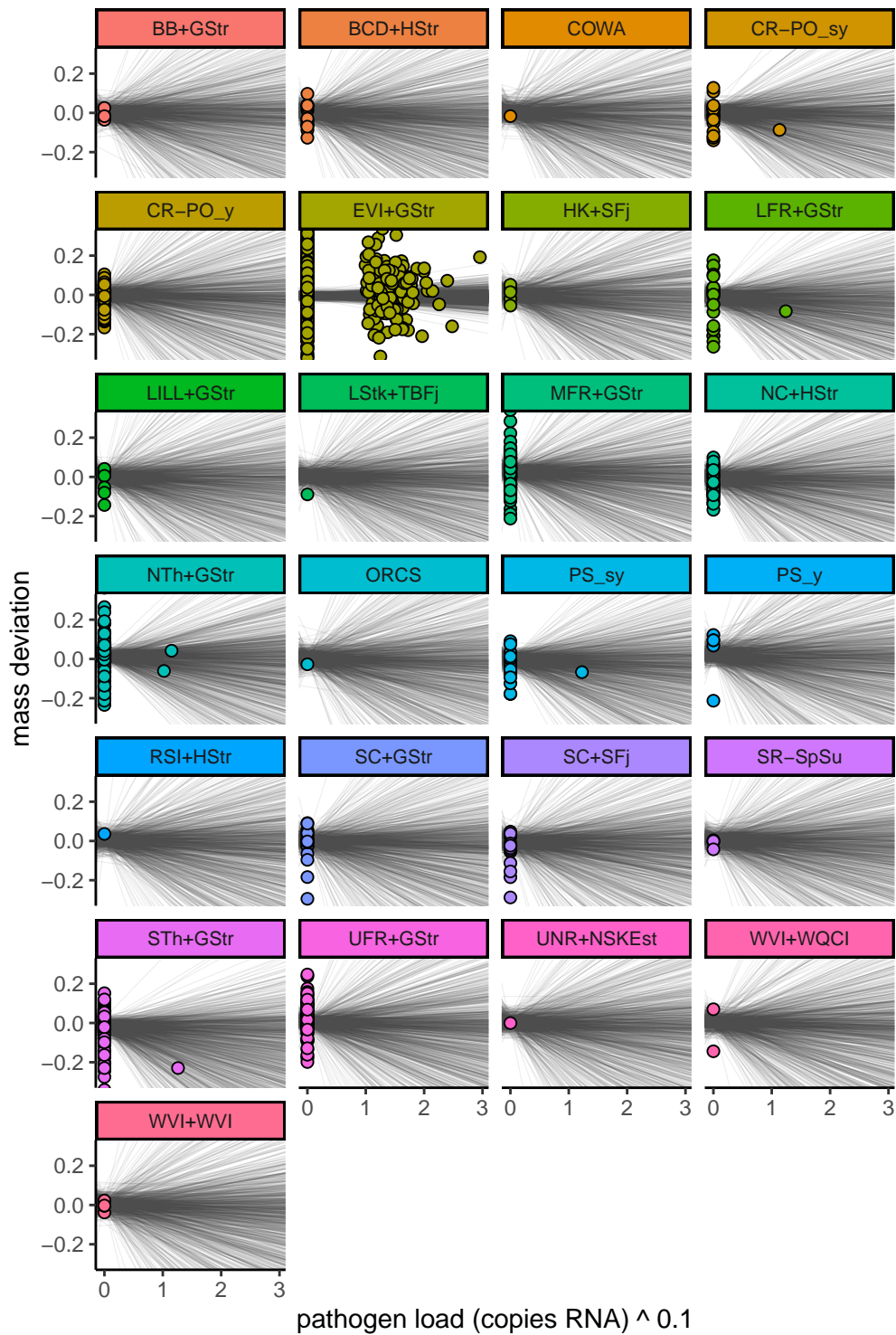
Ceratonova shasta SpSu



Ceratonova shasta FaWi

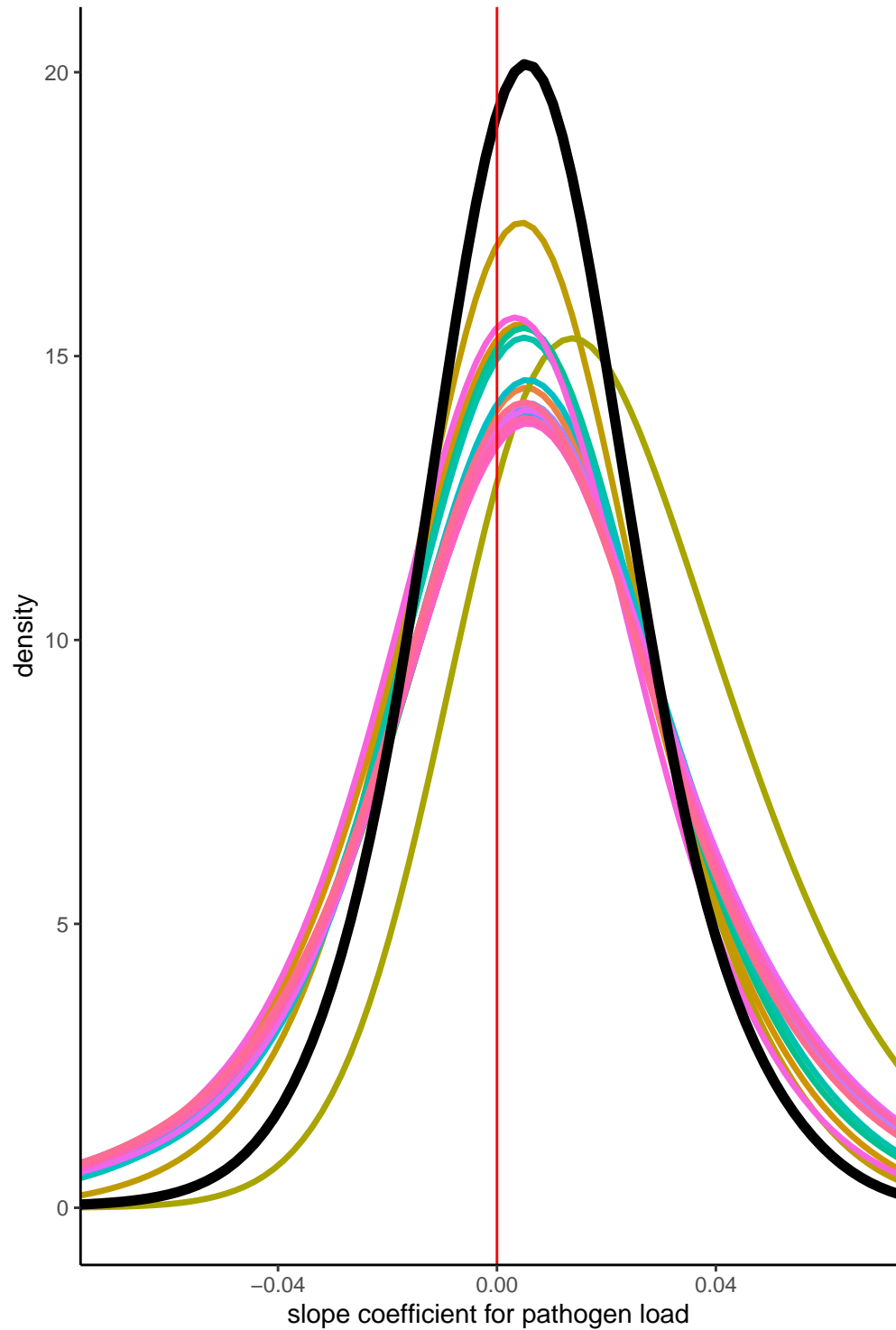
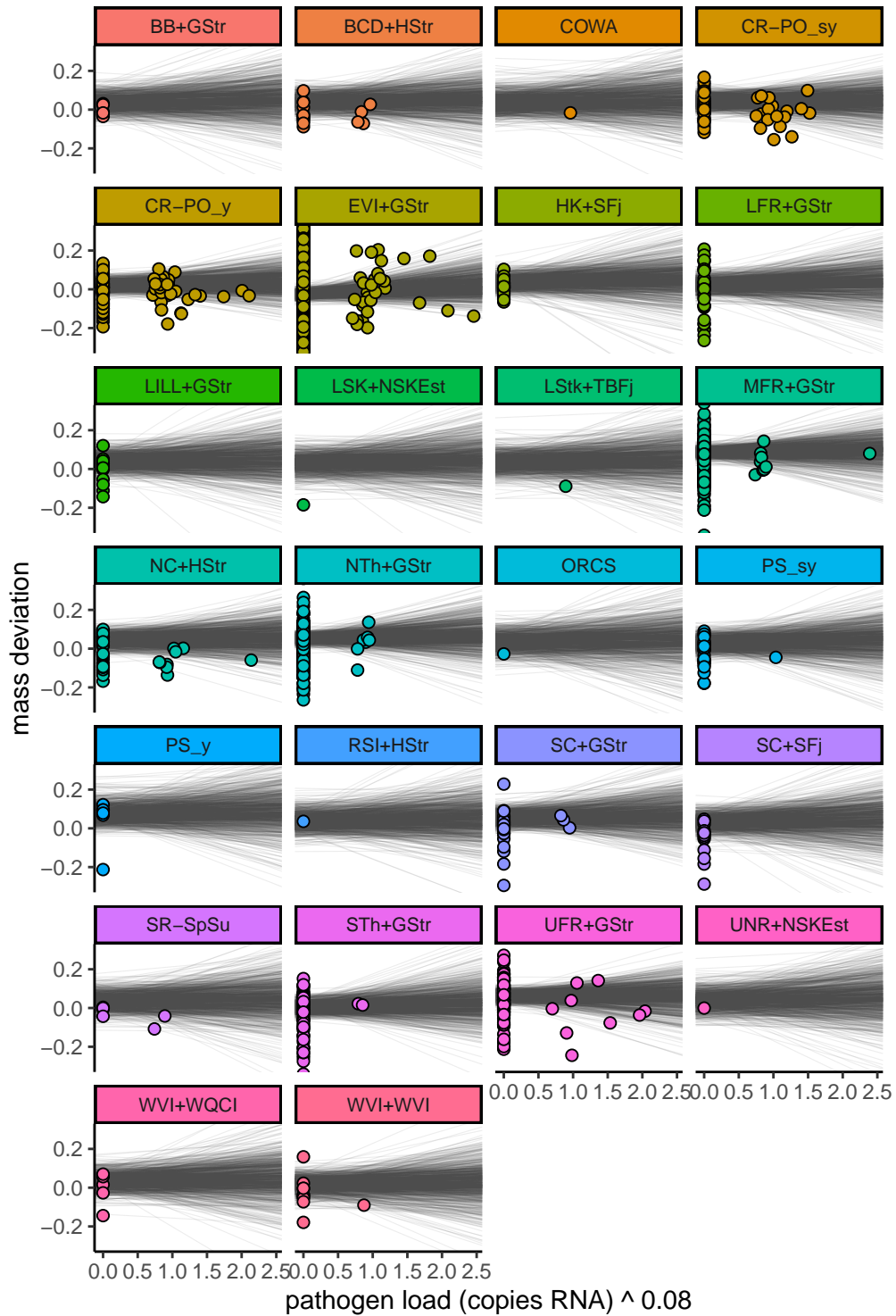


Pacific Salmon Nidovirus SpSu

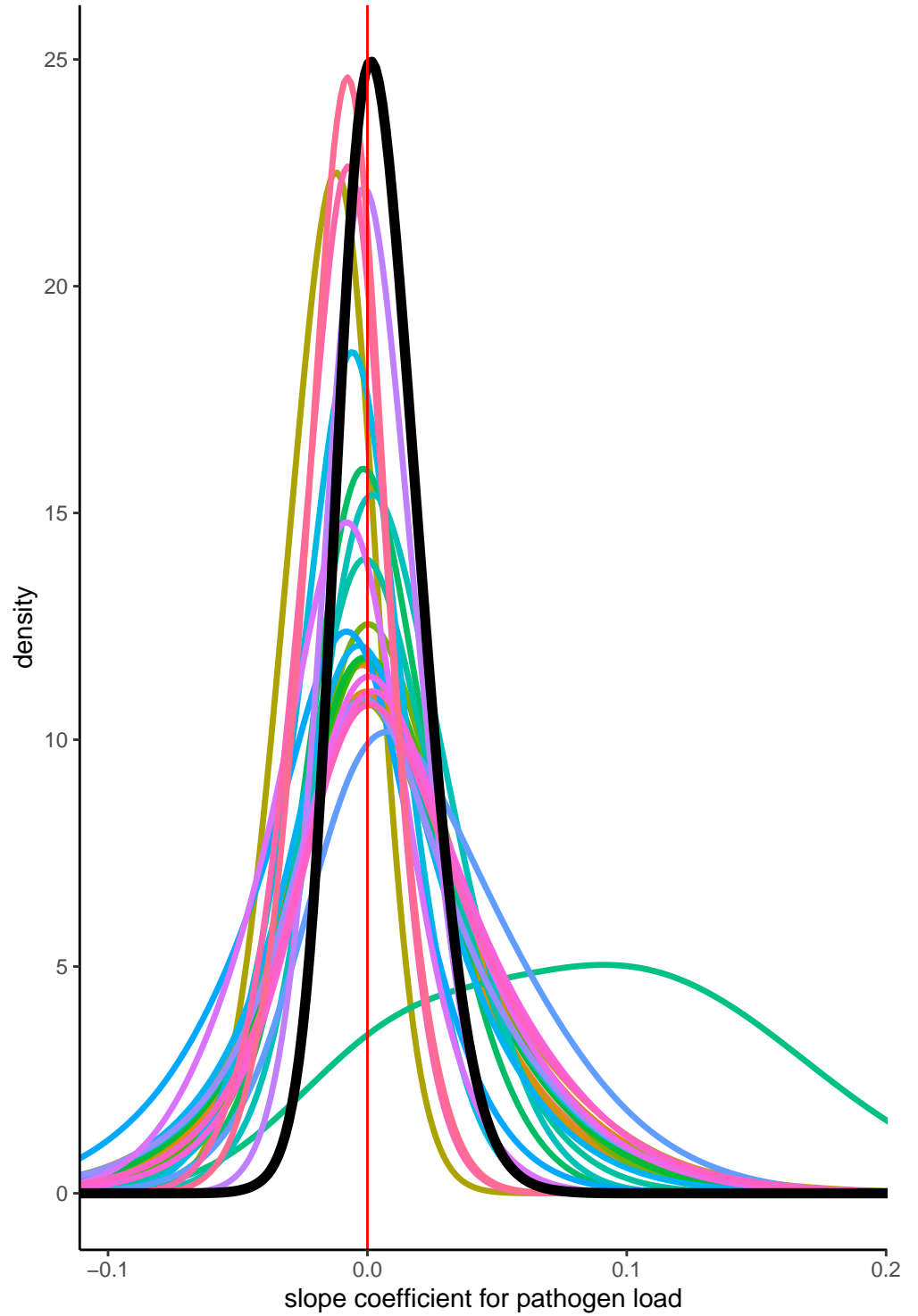
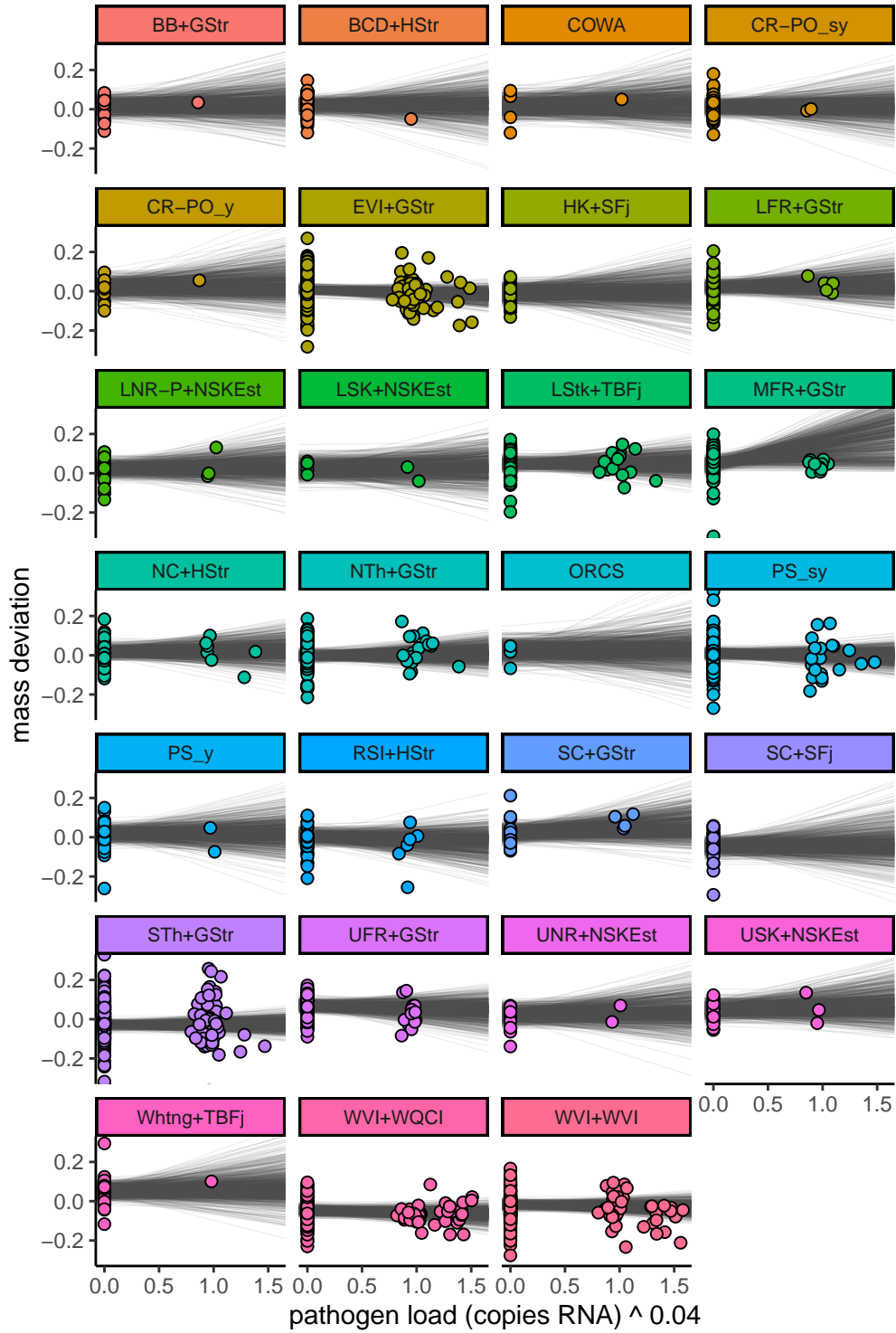




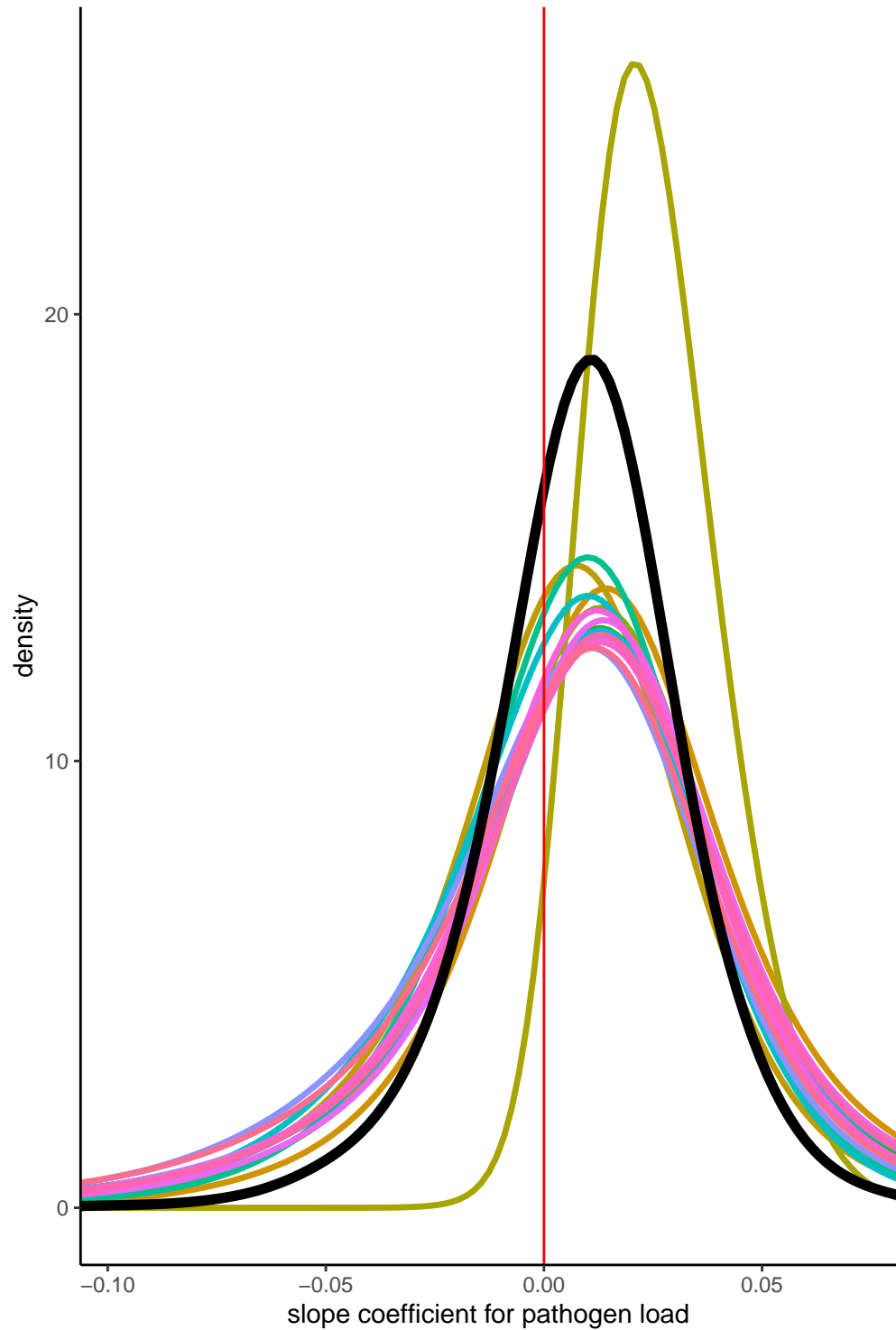
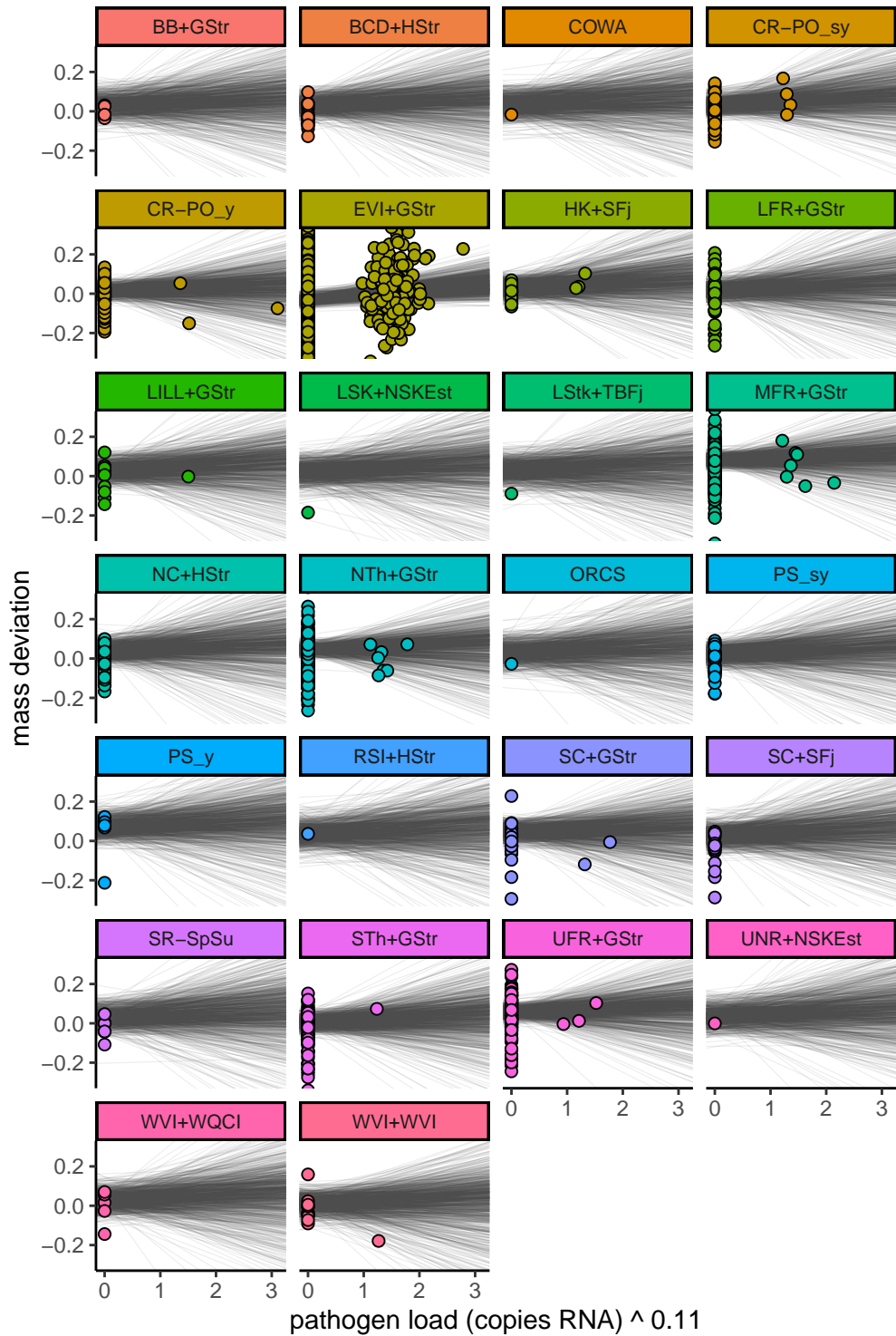
Facilispora margolisi SpSu



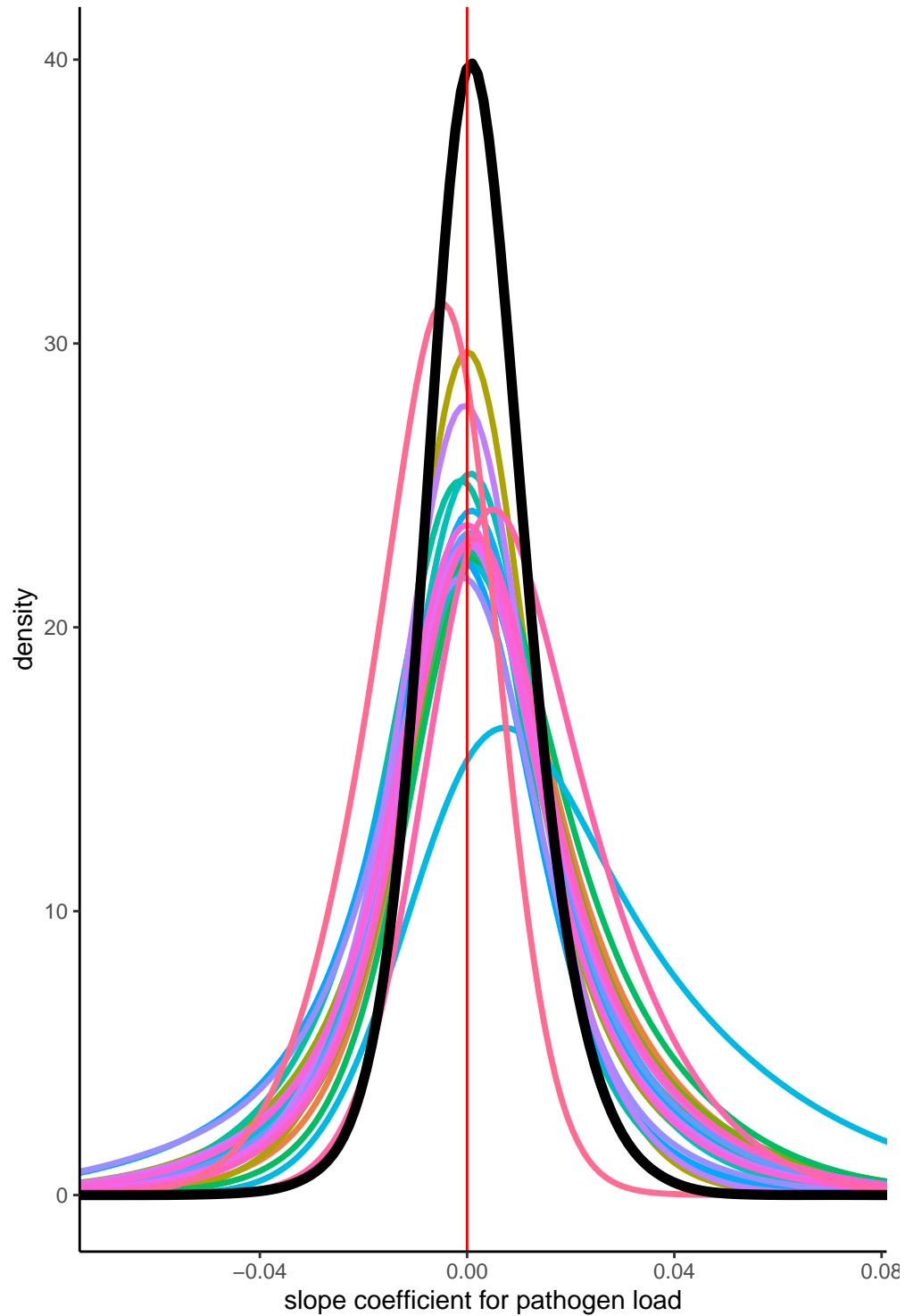
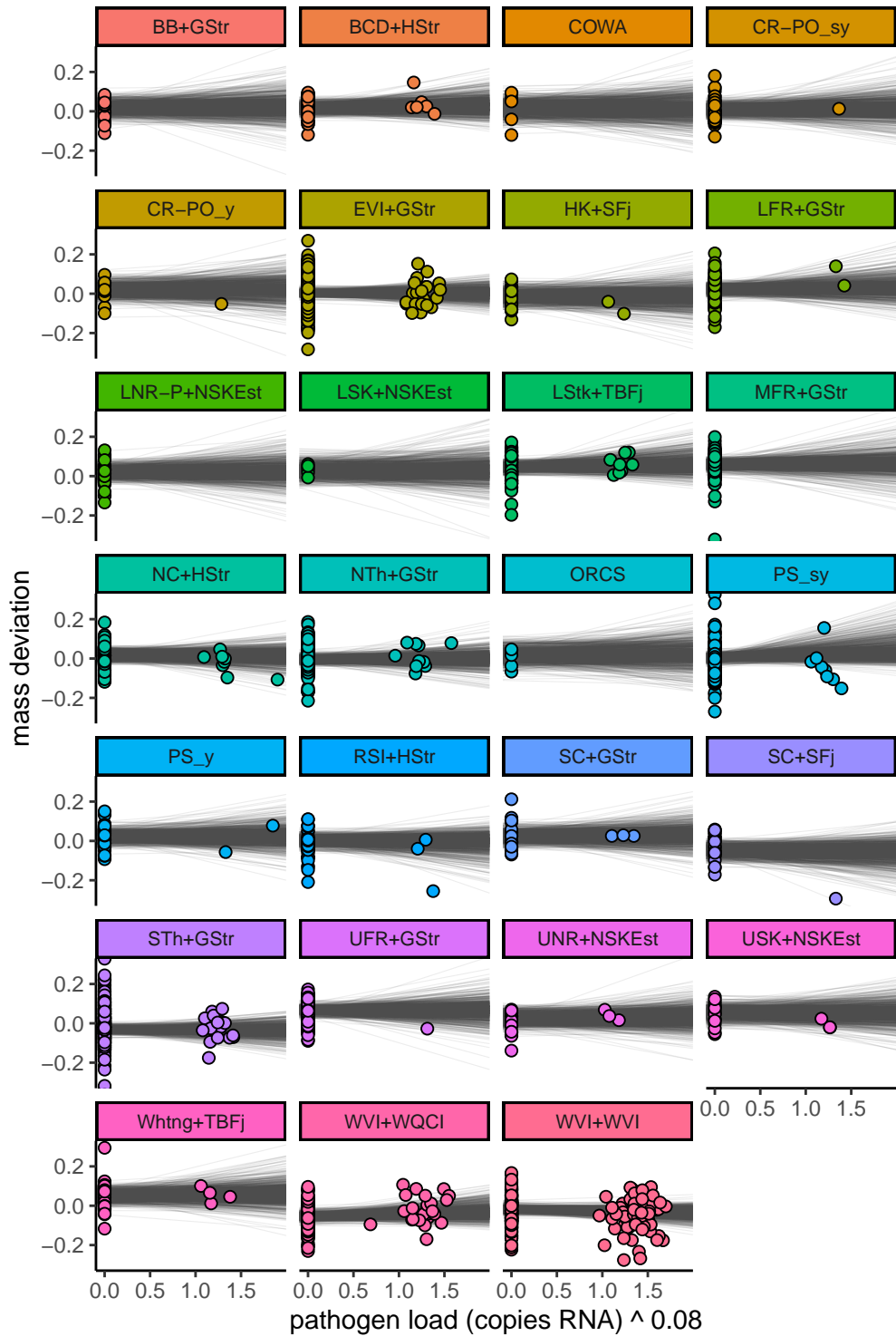
*Facilispora margolisi* FaWi



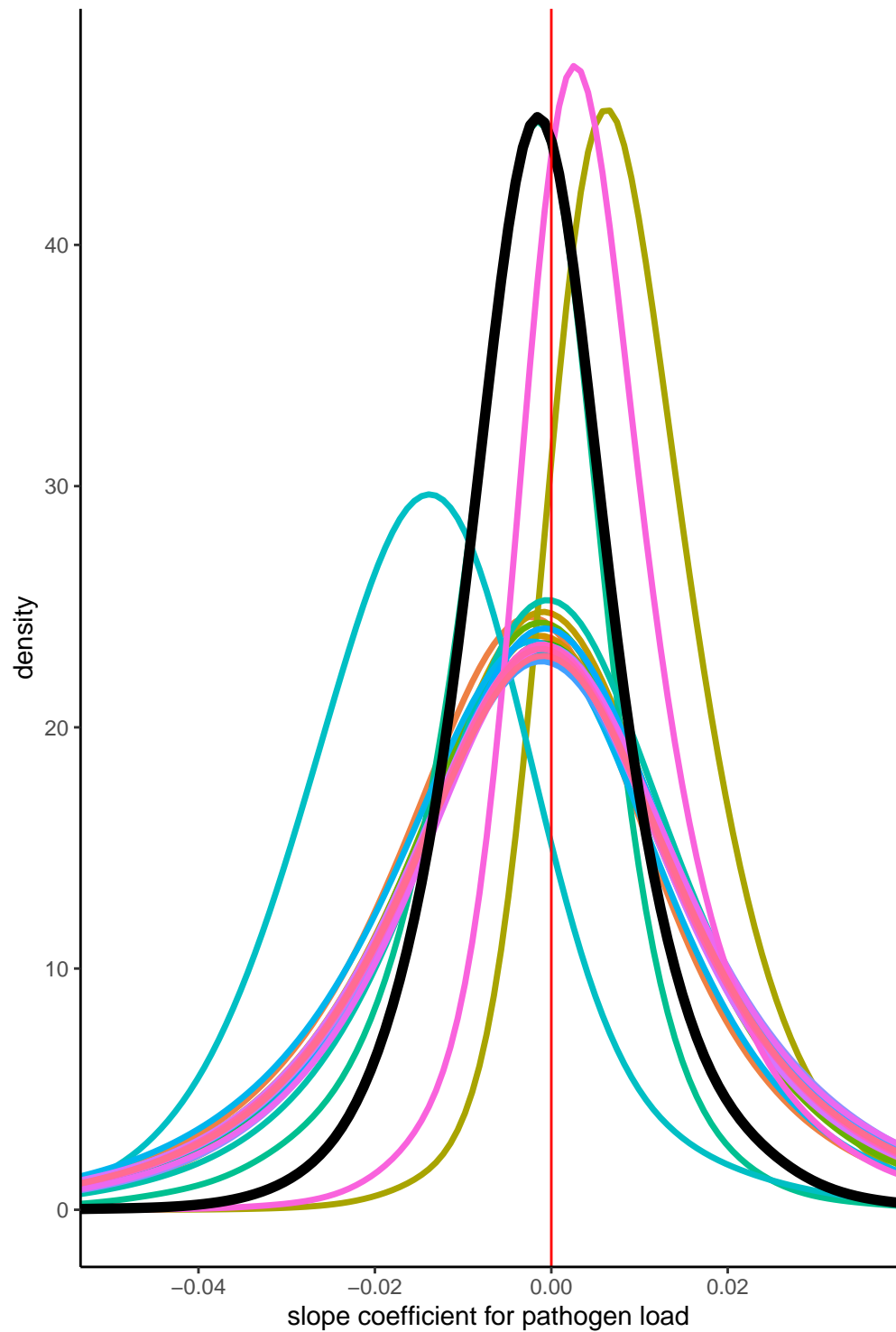
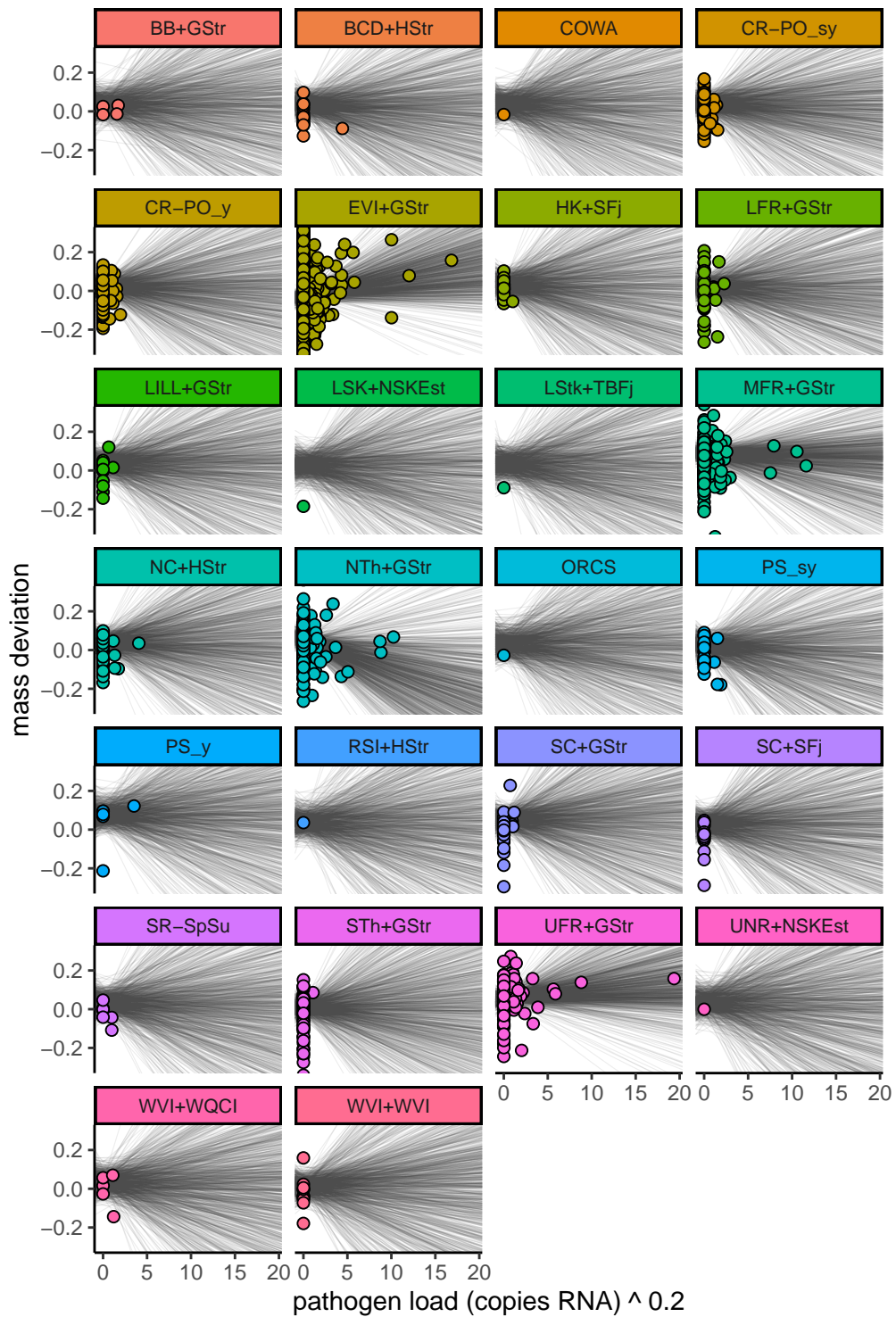
Flavobacterium psychrophilum SpSu



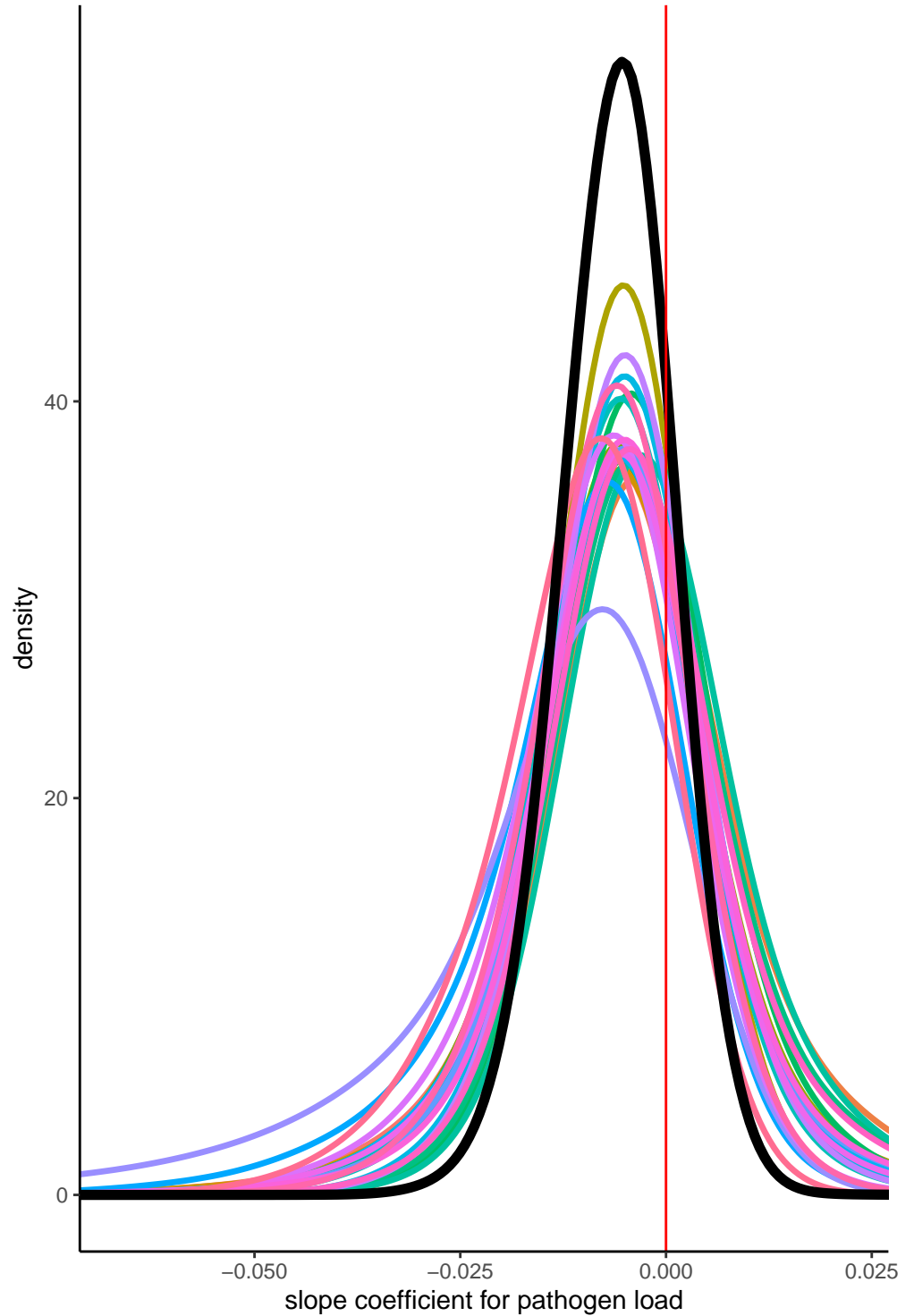
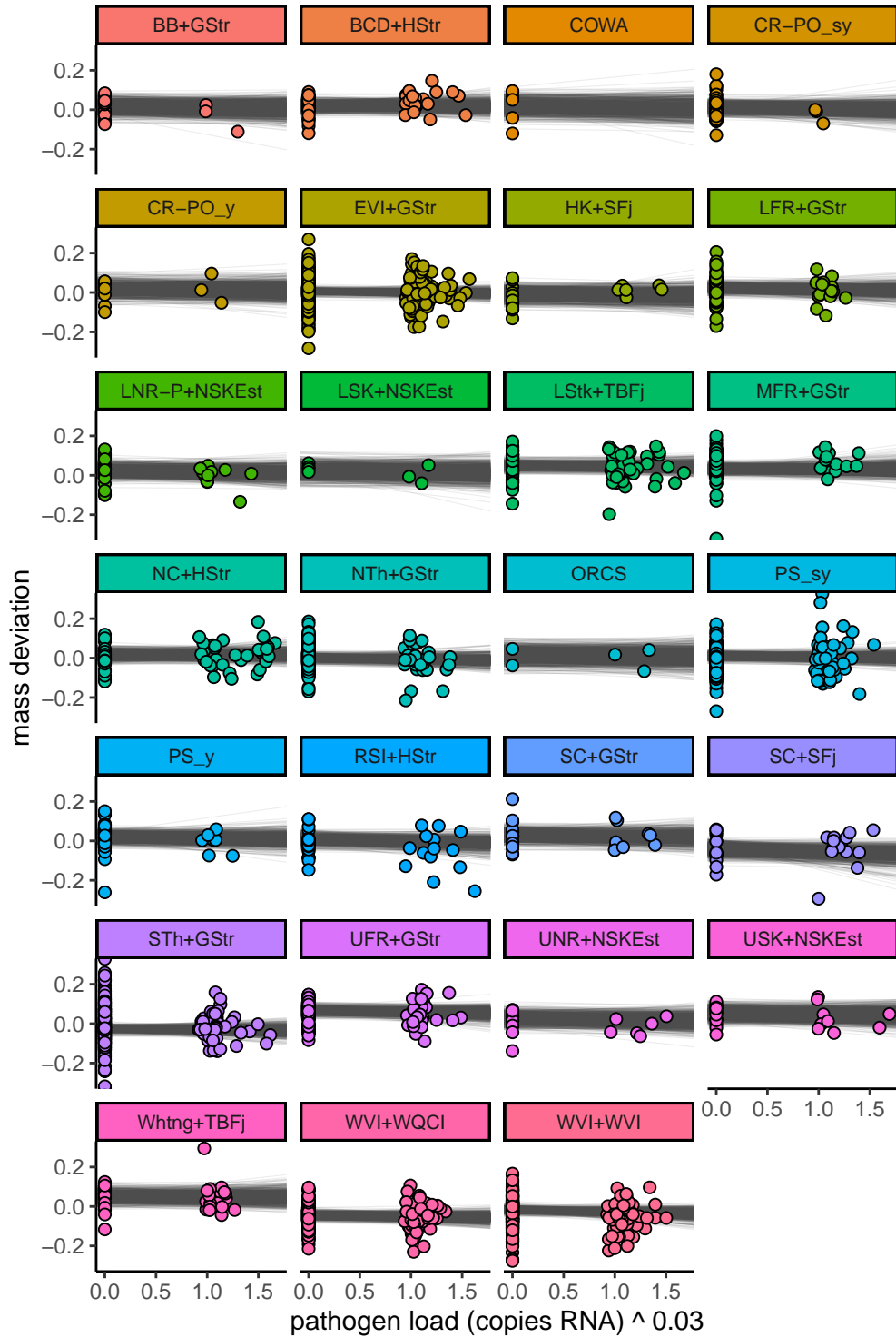
Flavobacterium psychrophilum FaWi



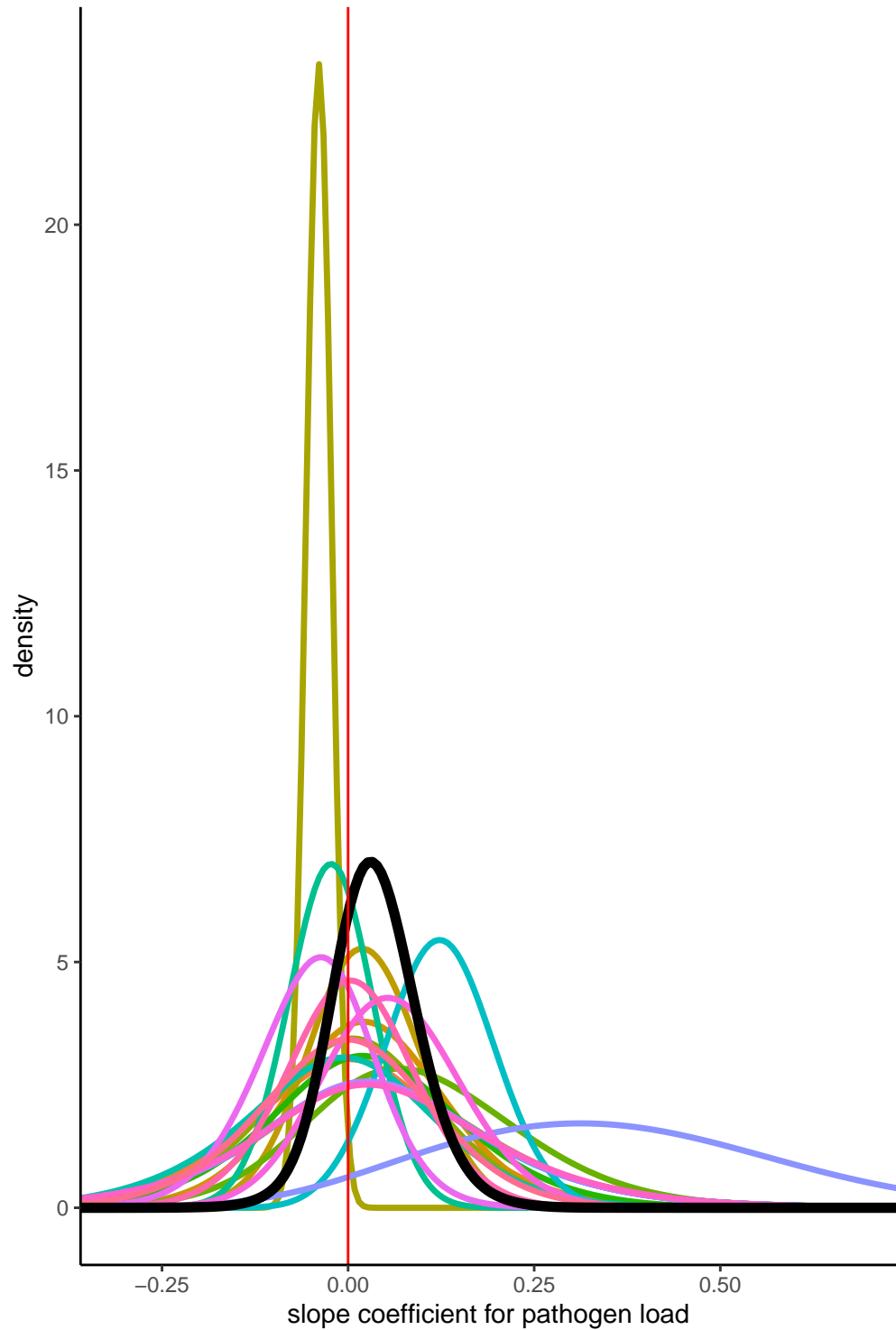
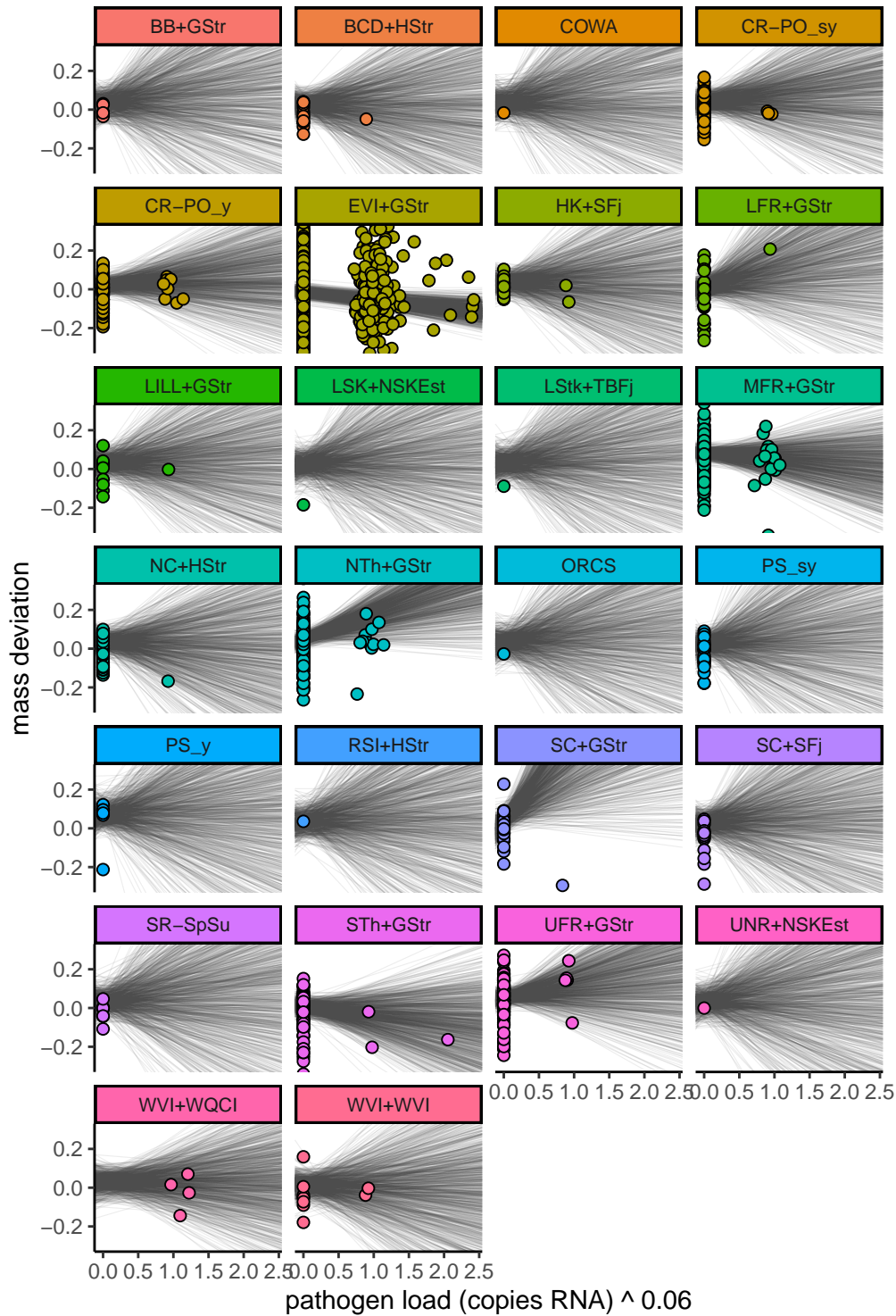
Ichthyophonus hoferi SpSu



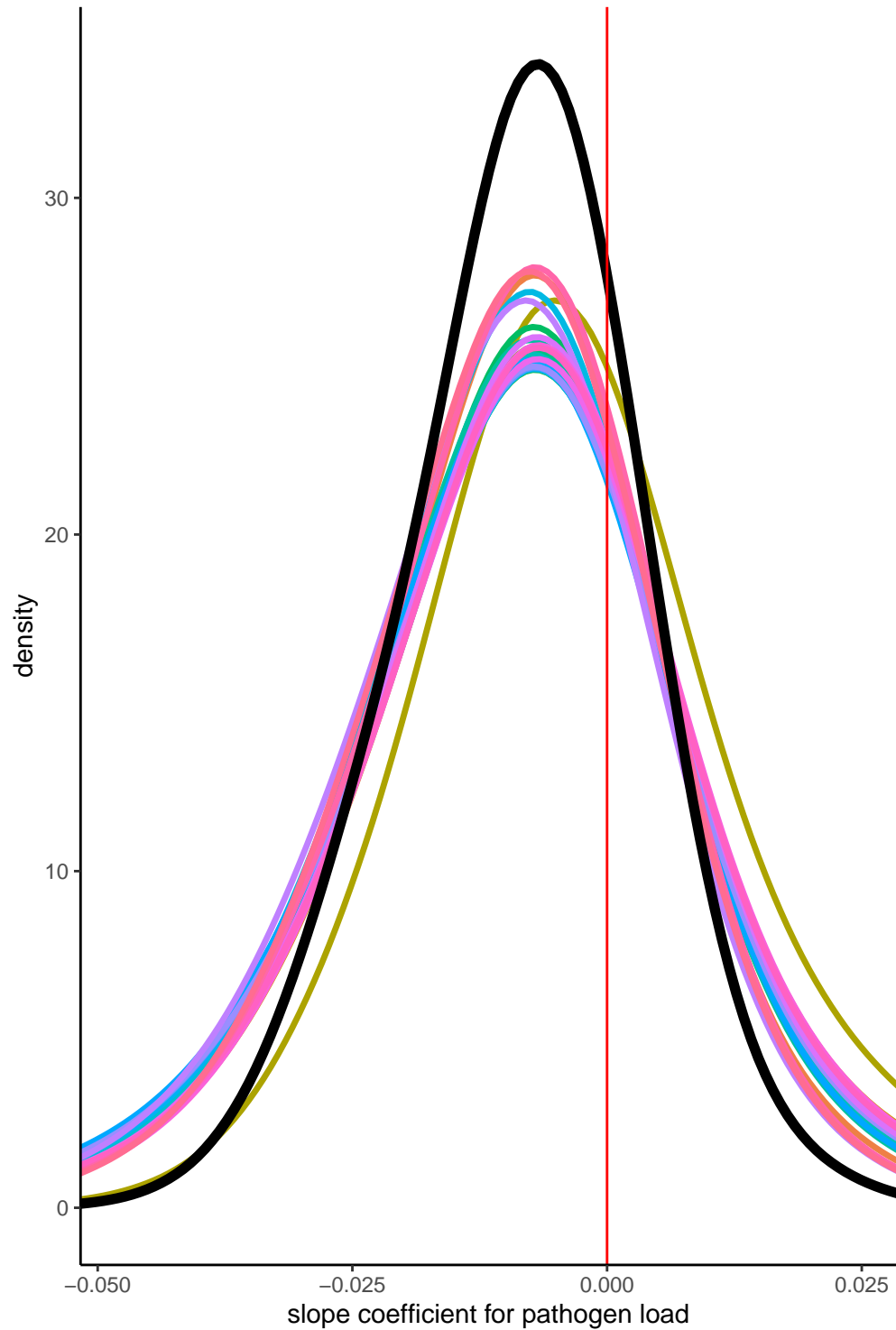
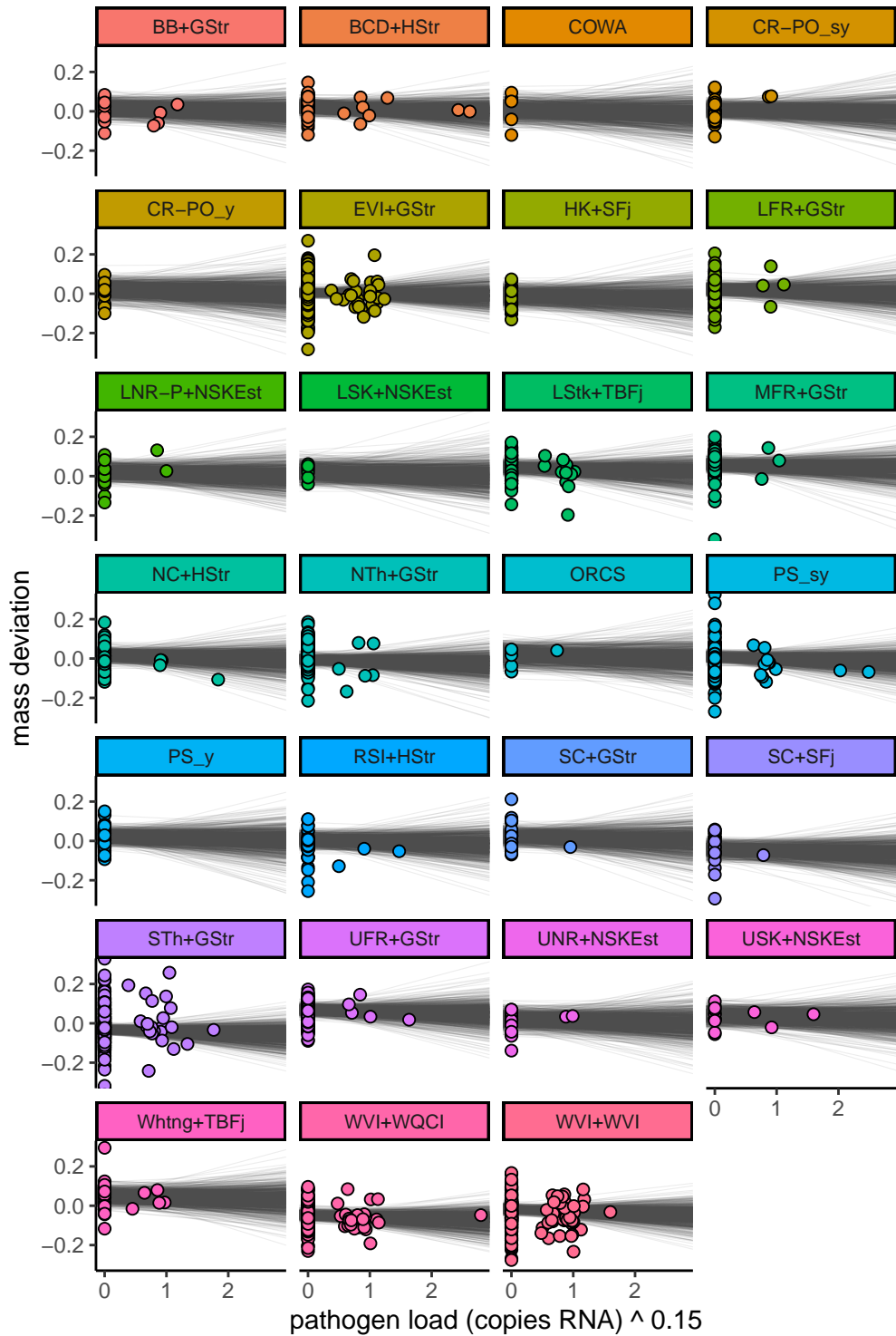
Ichthyophonus hoferi FaWi



Ichthyophthirius multifiliis SpSu

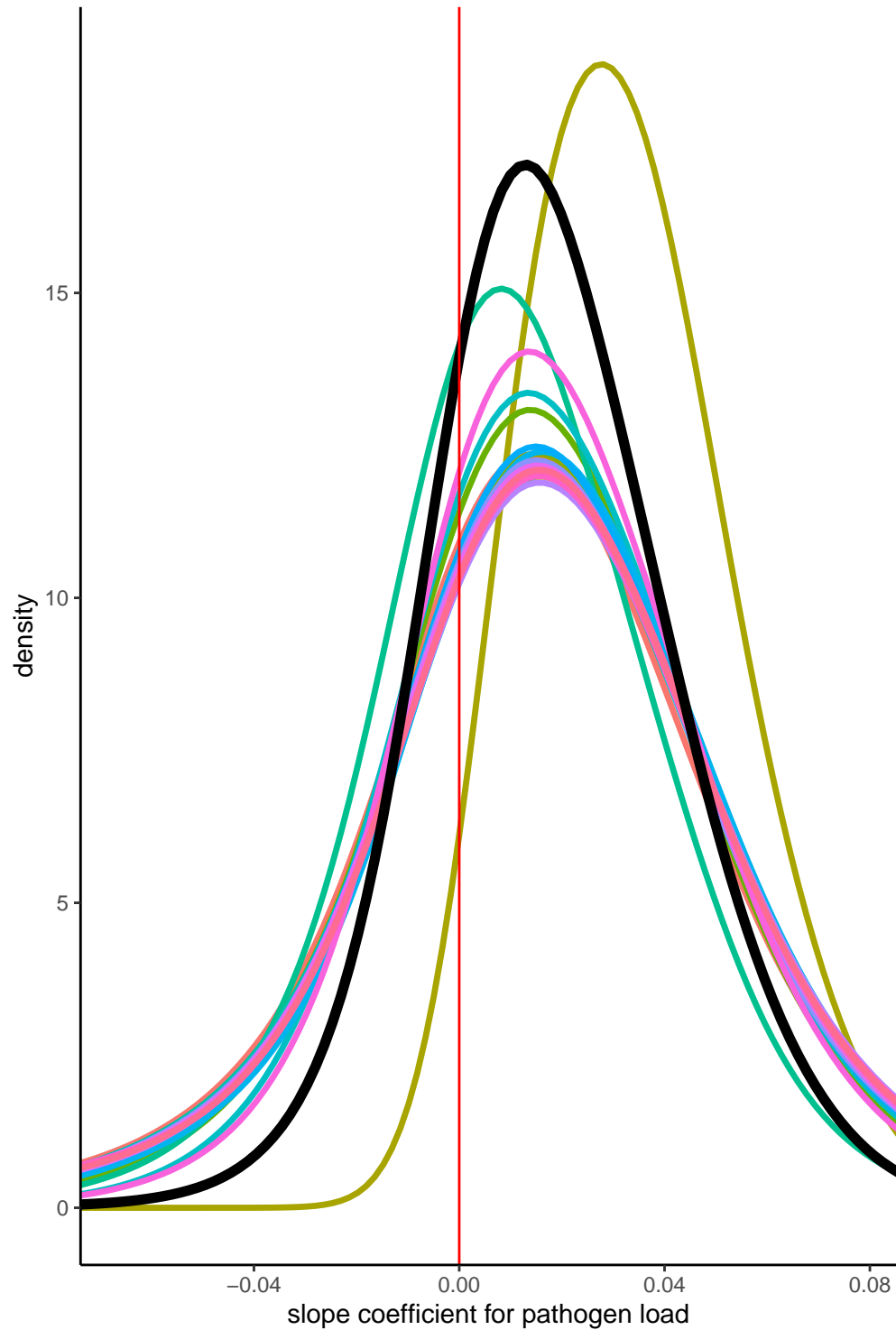
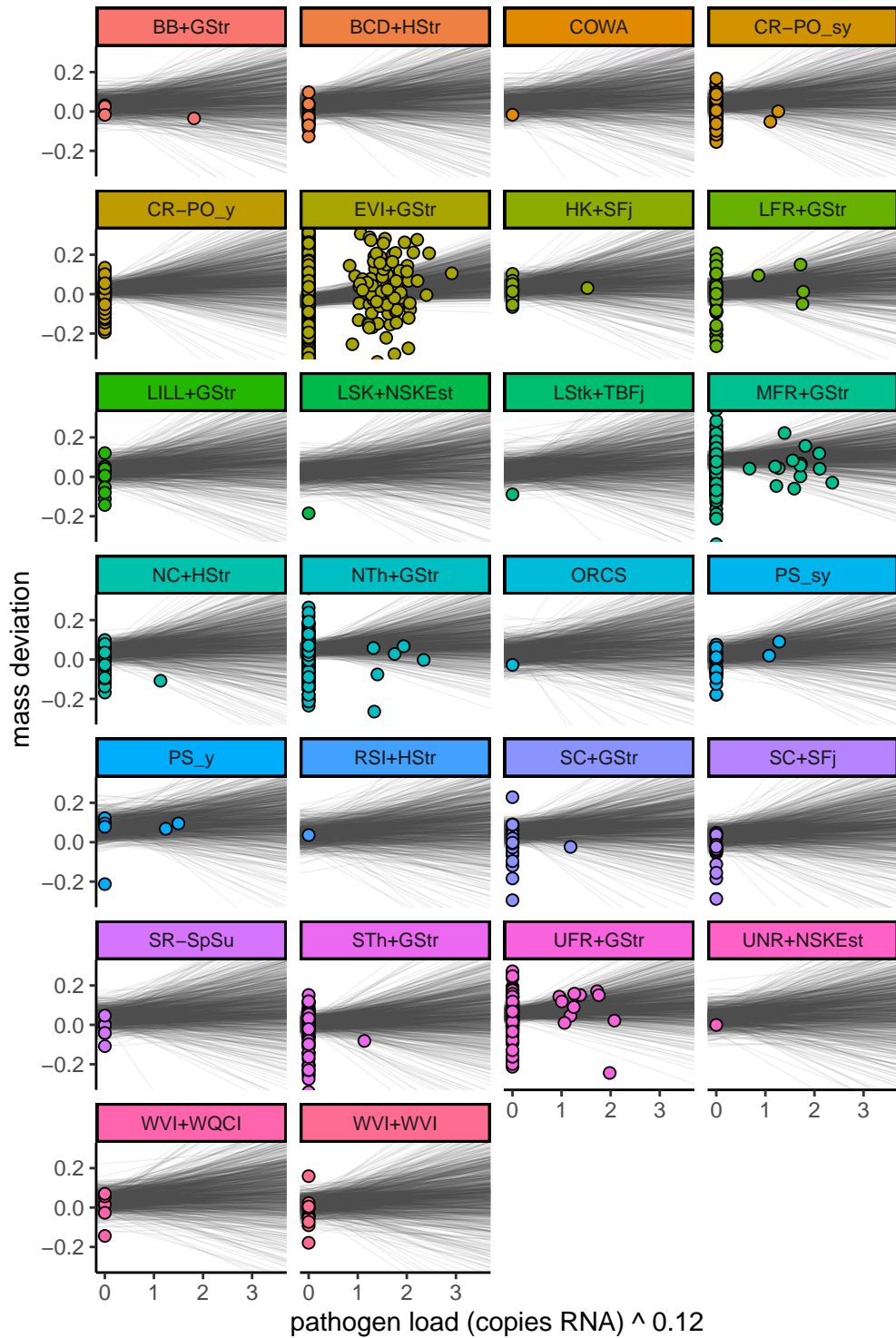


*Ichthyophthirius multifiliis* FaWi

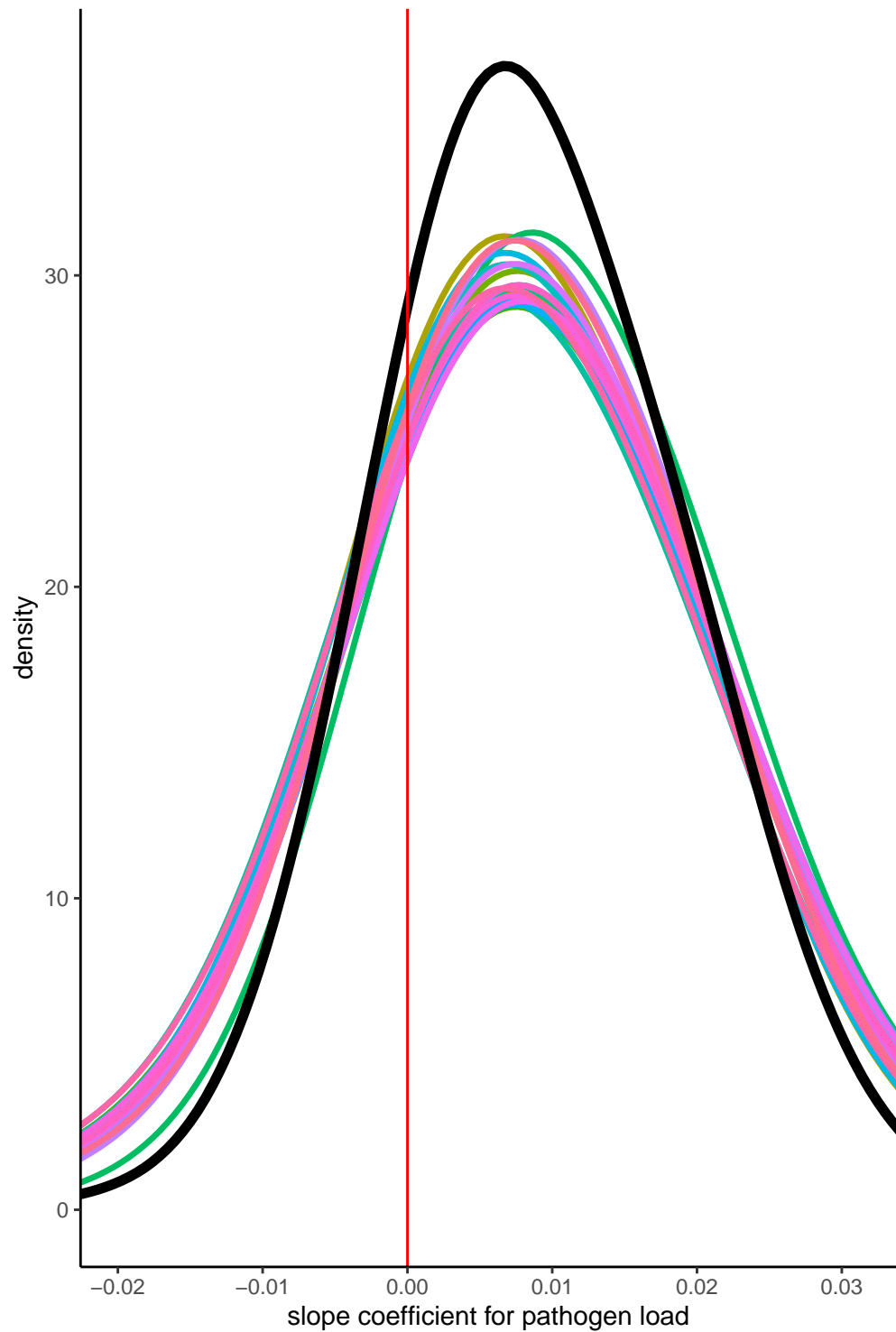
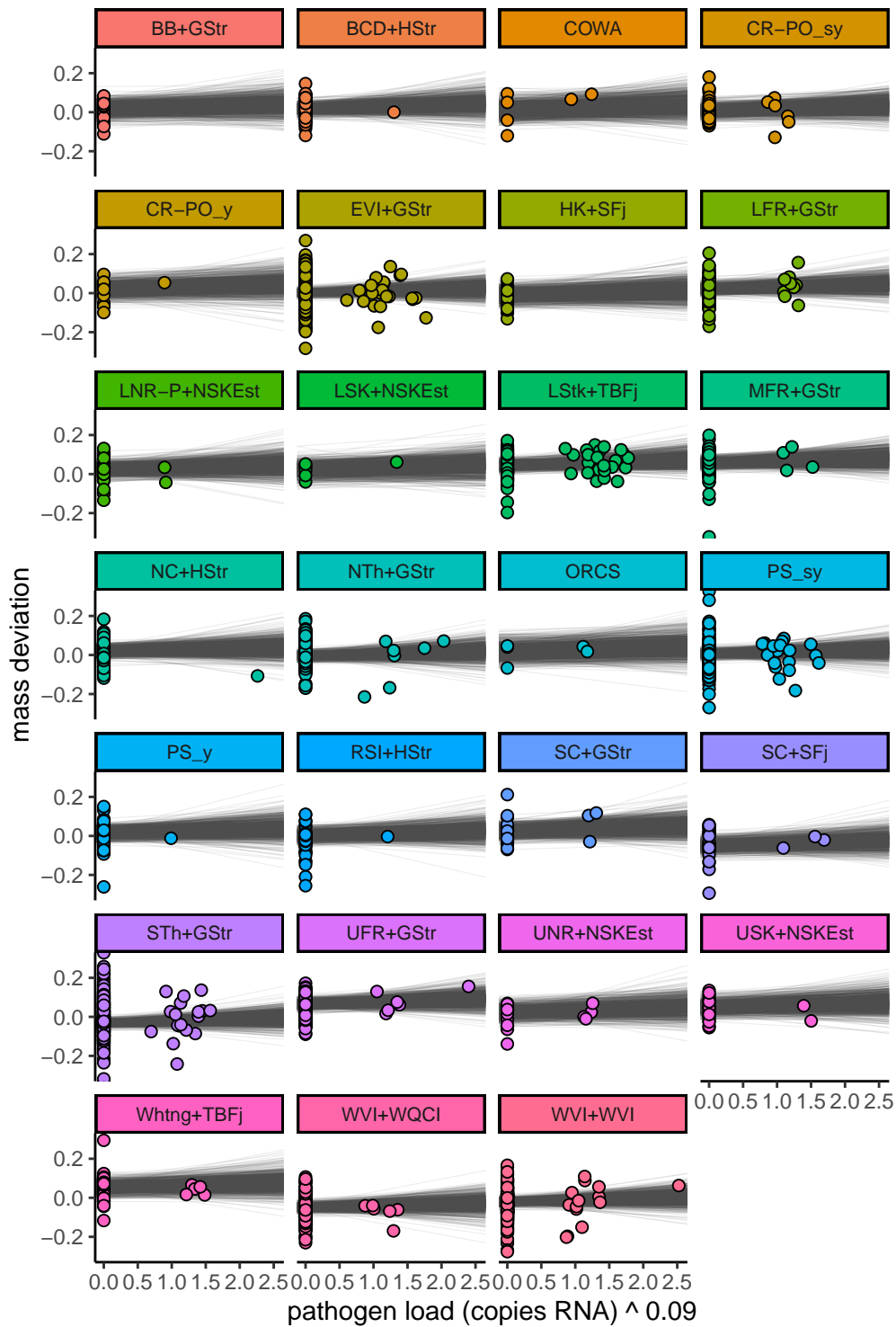




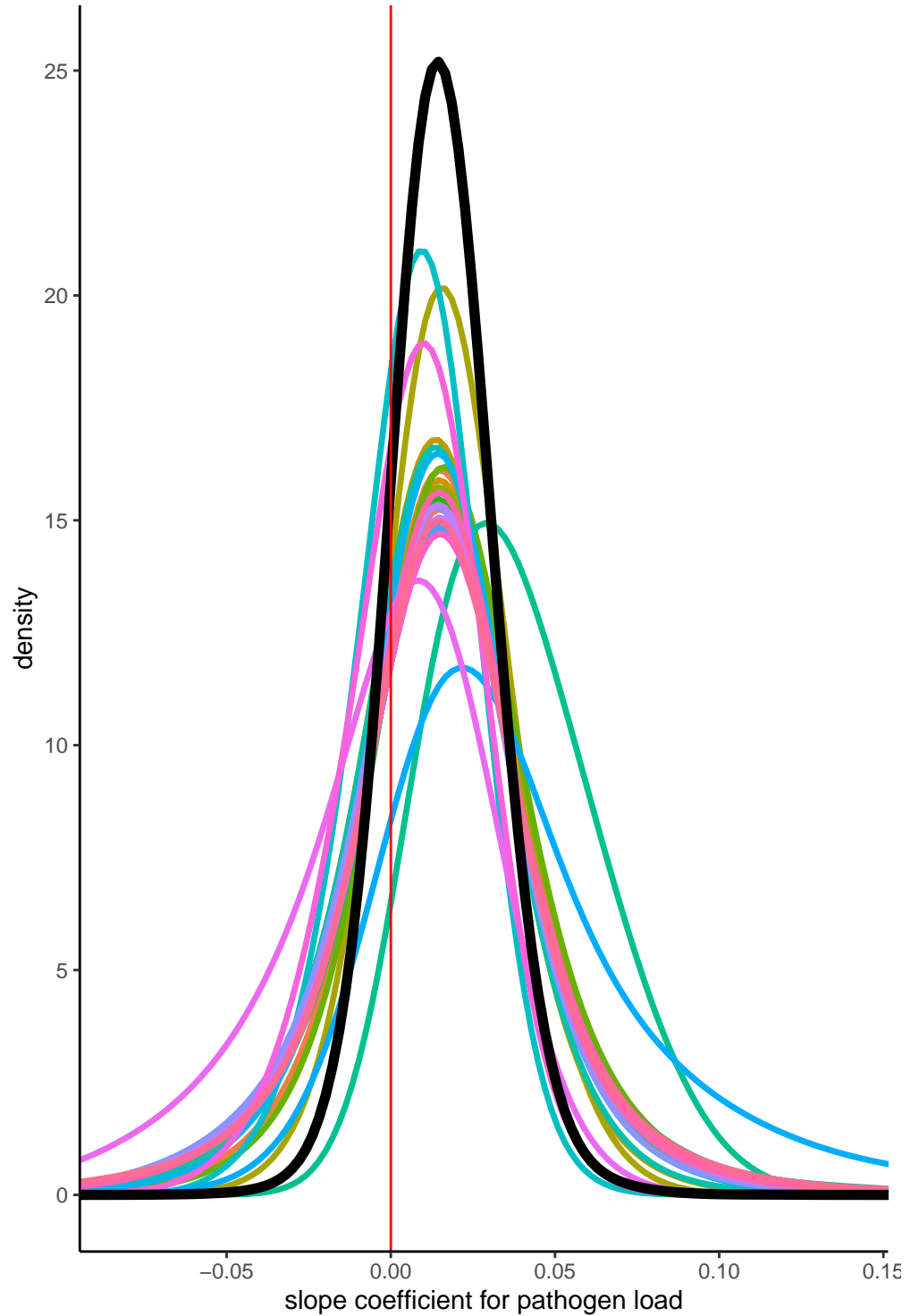
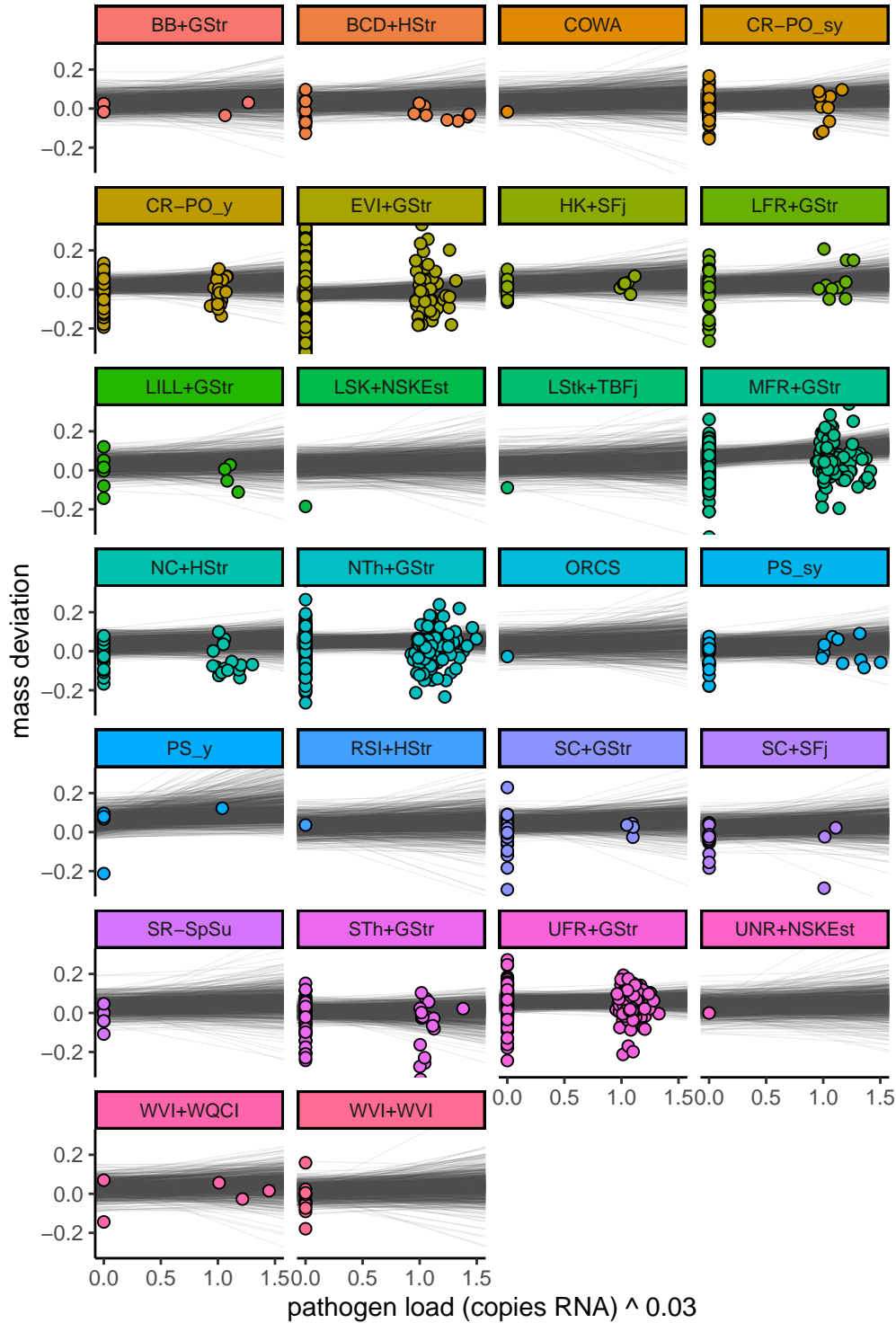
Kudoa thyrsites SpSu



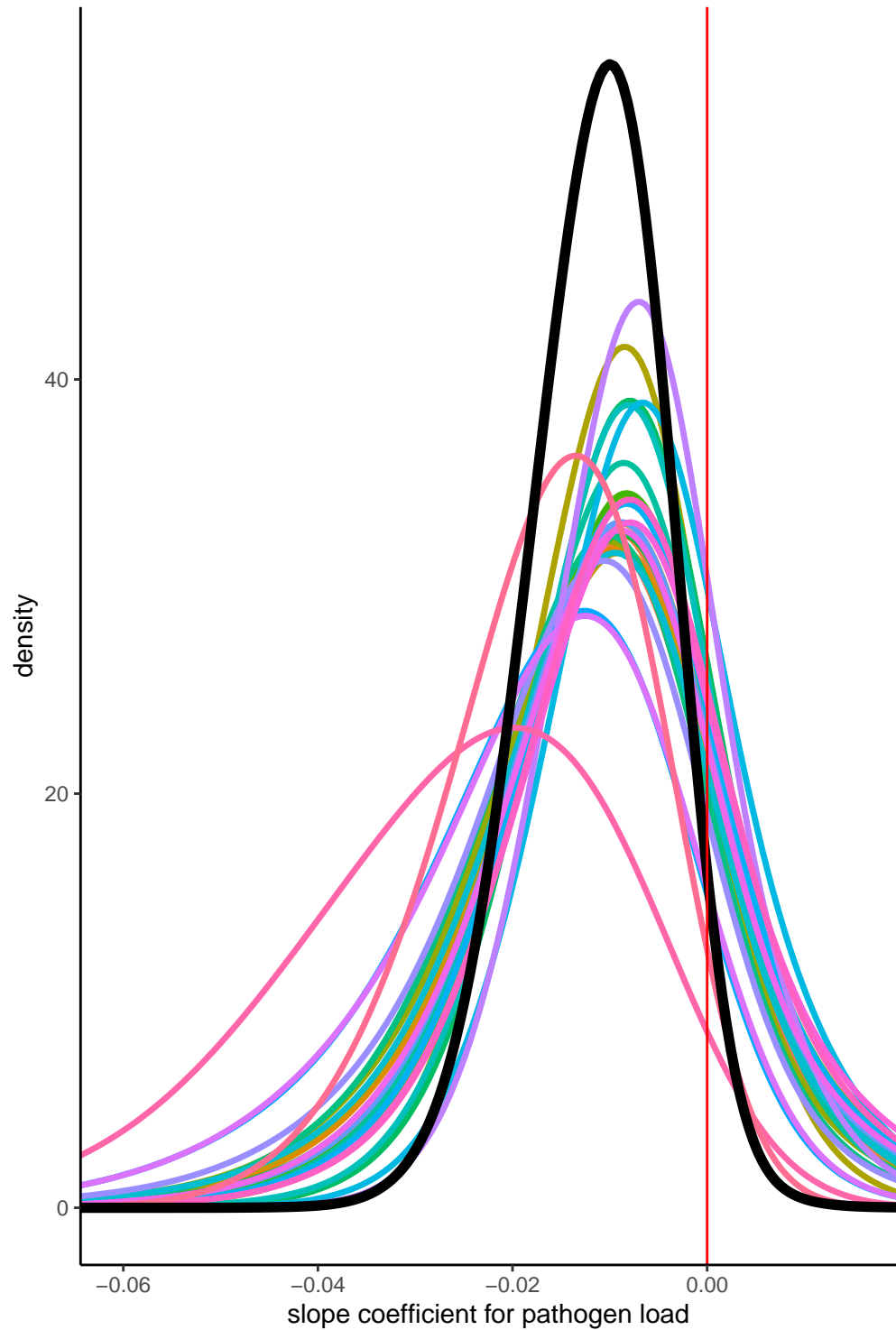
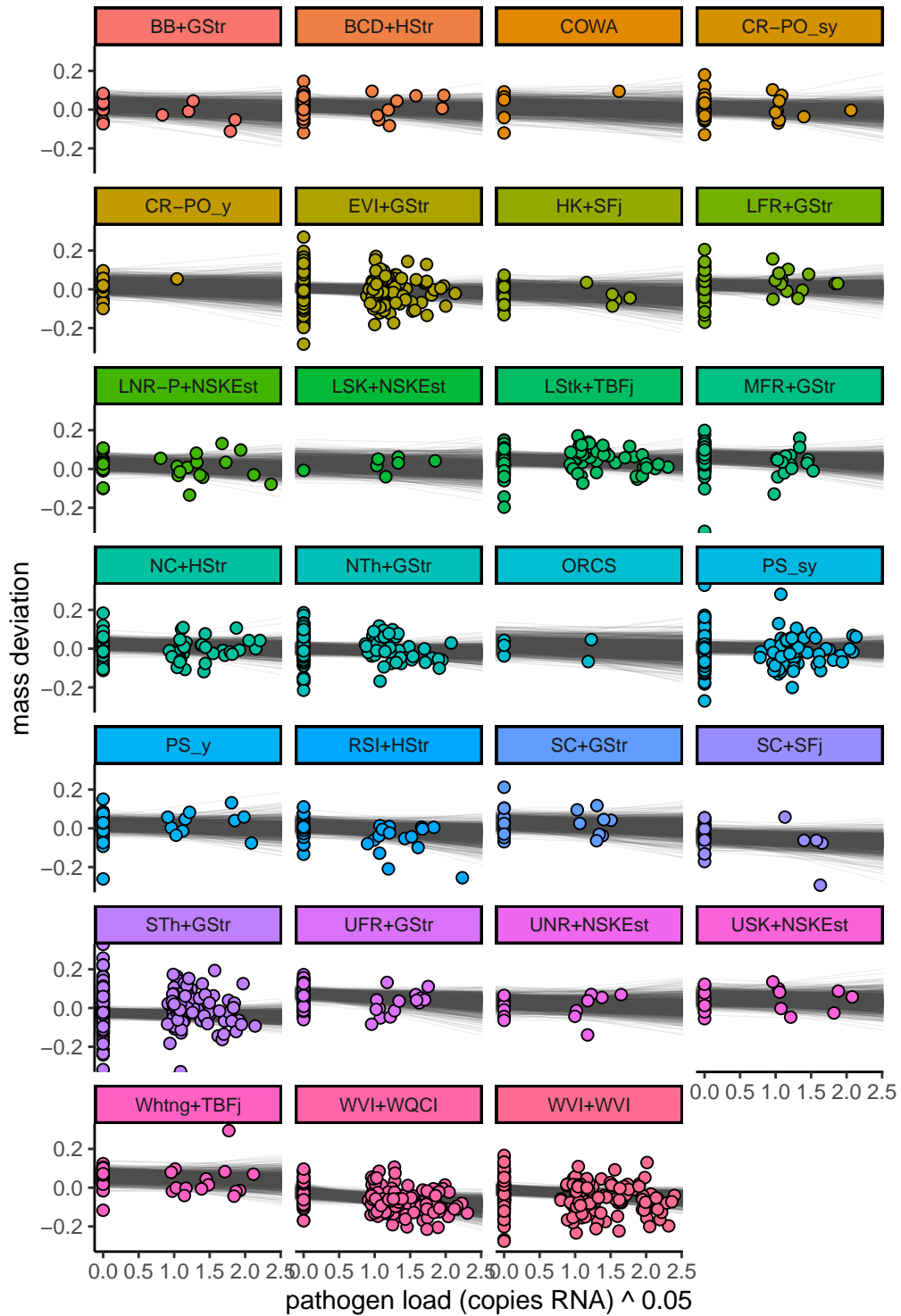
Kudoa thyrsites FaWi



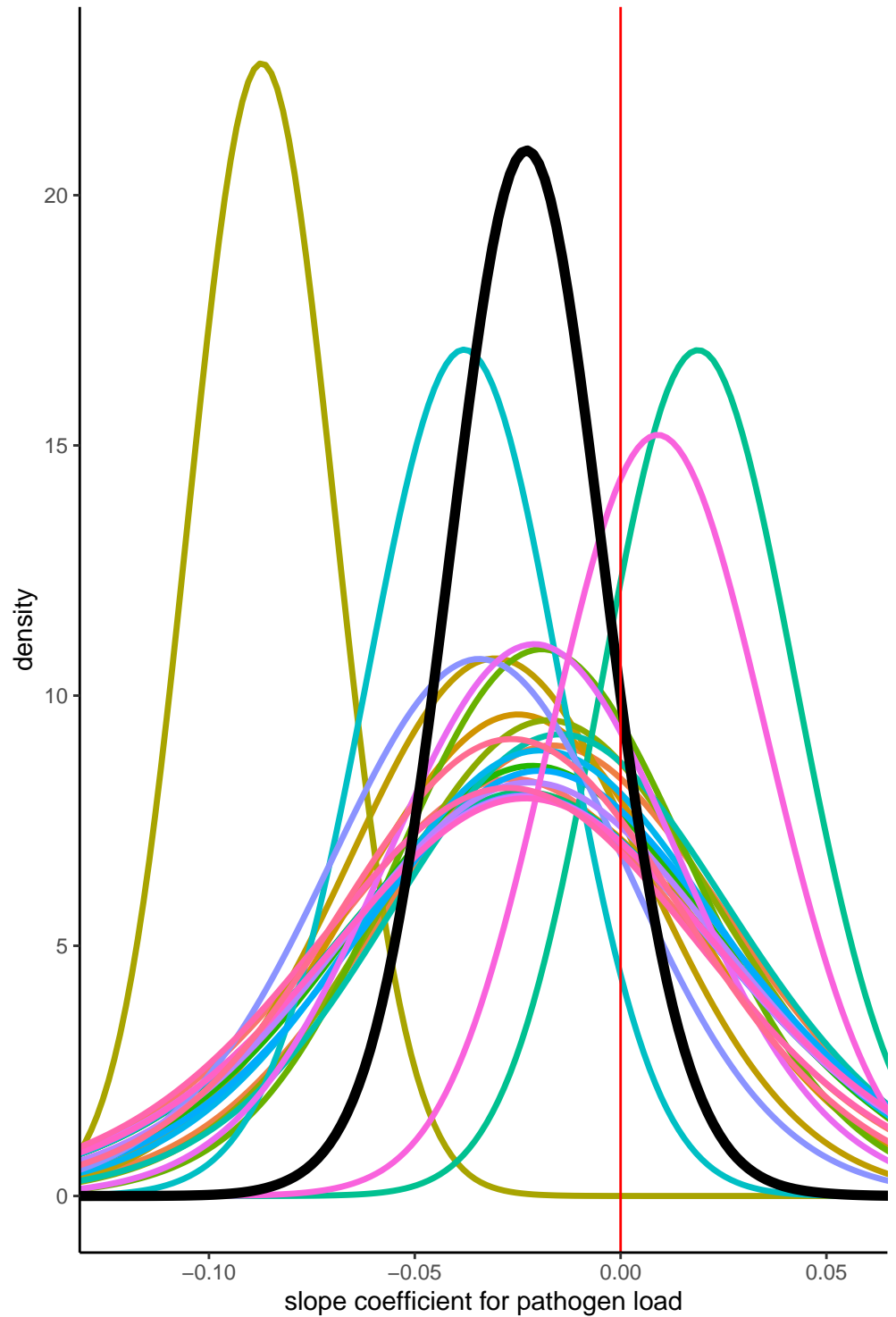
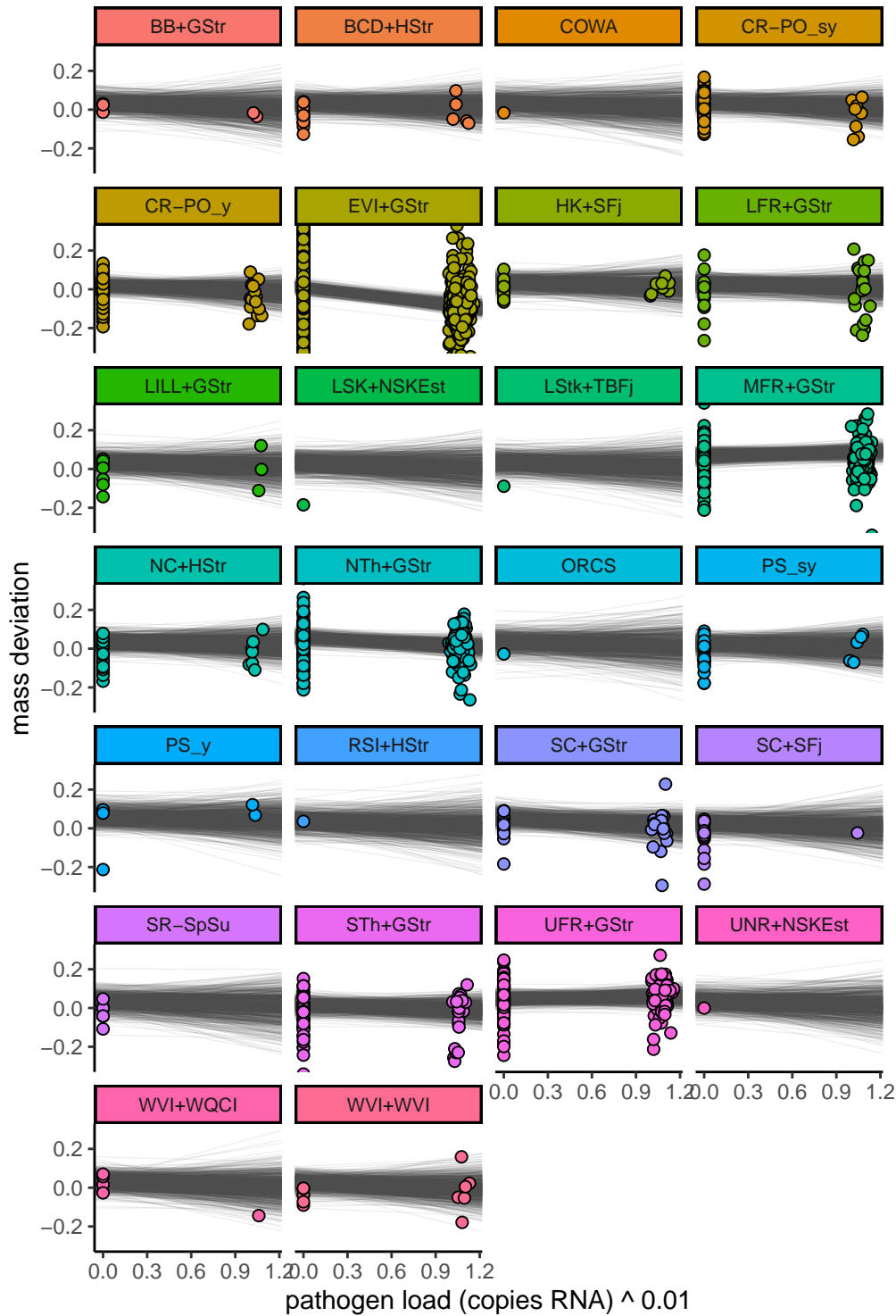
Loma salmonae SpSu



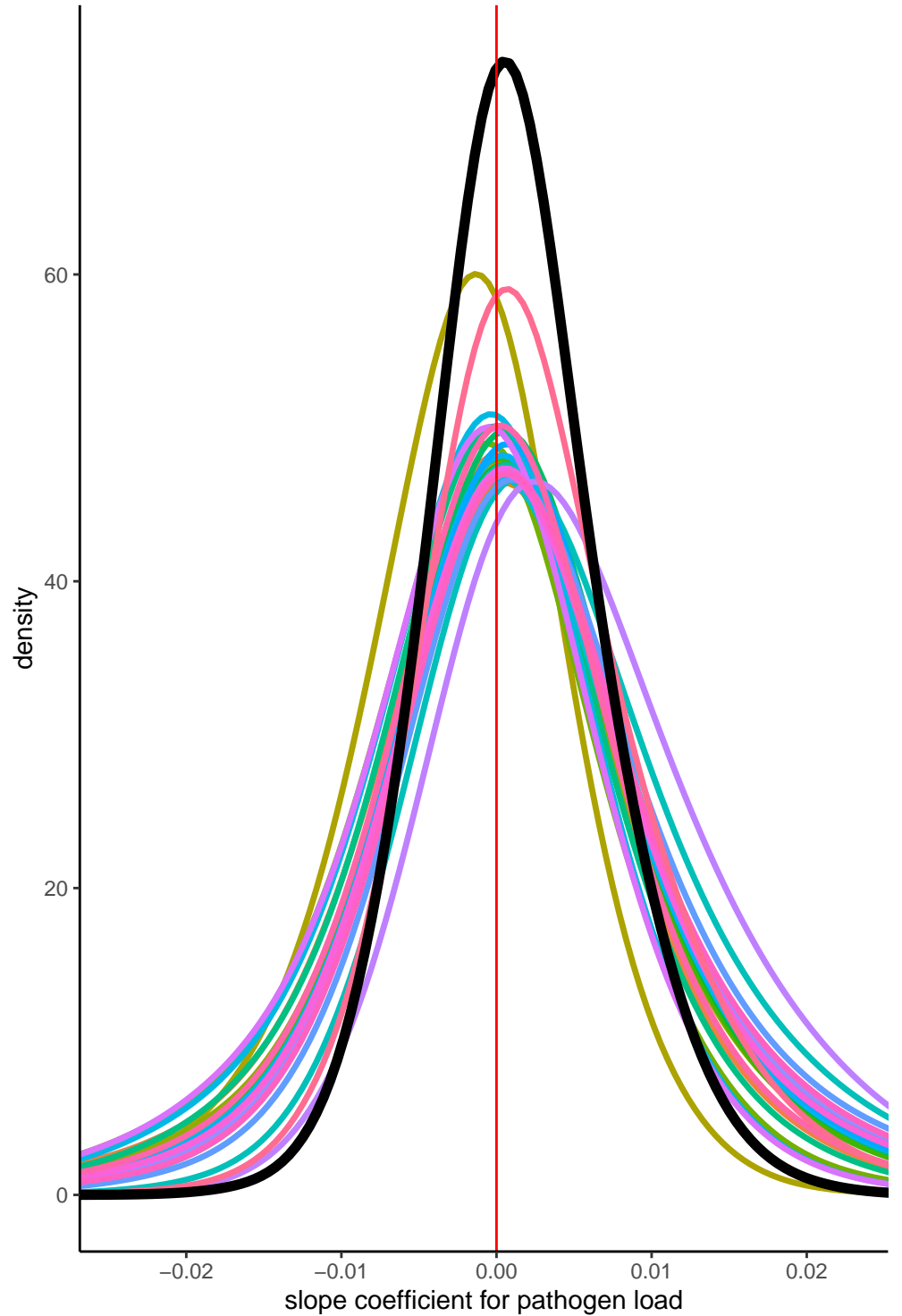
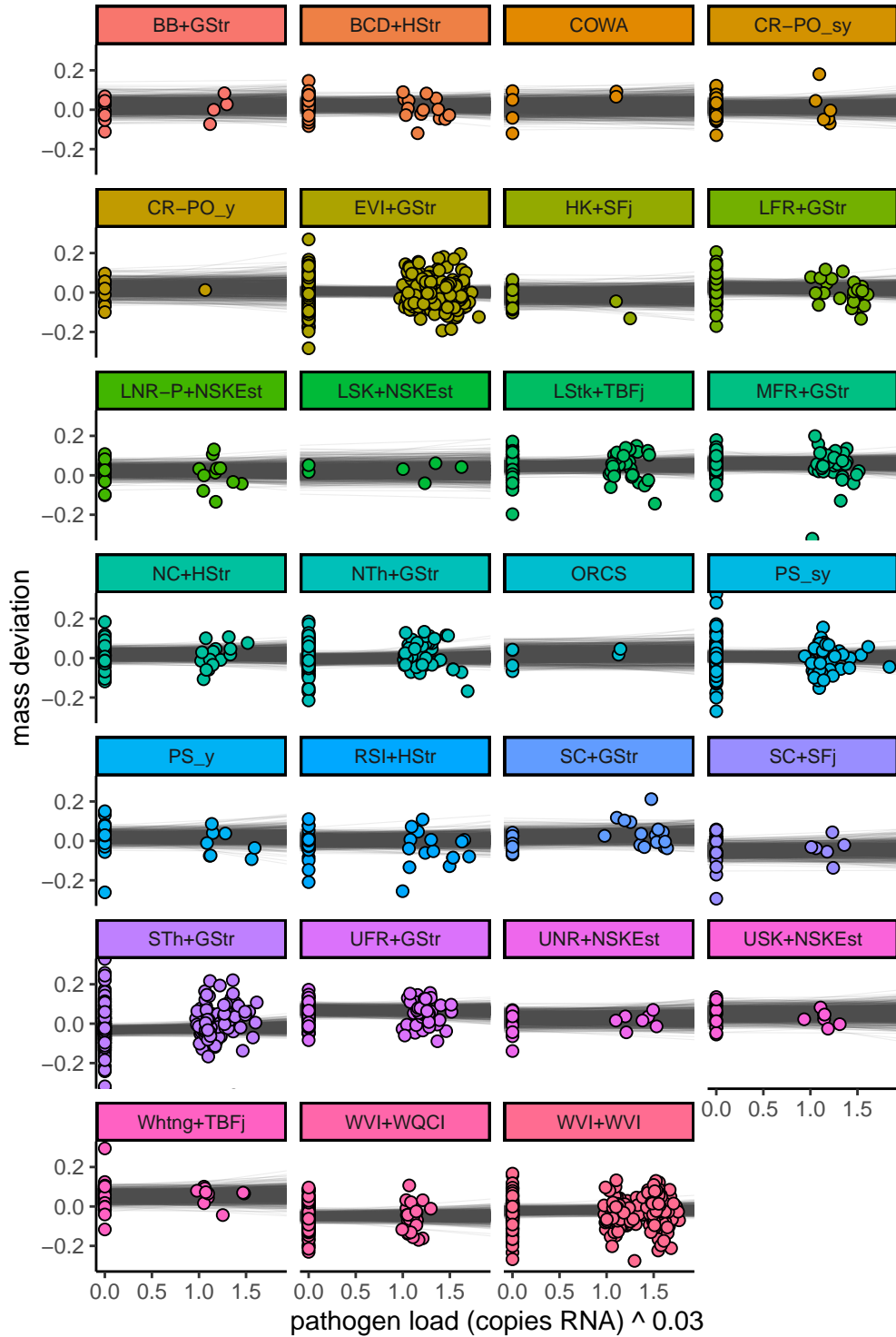
Loma salmonae FaWi



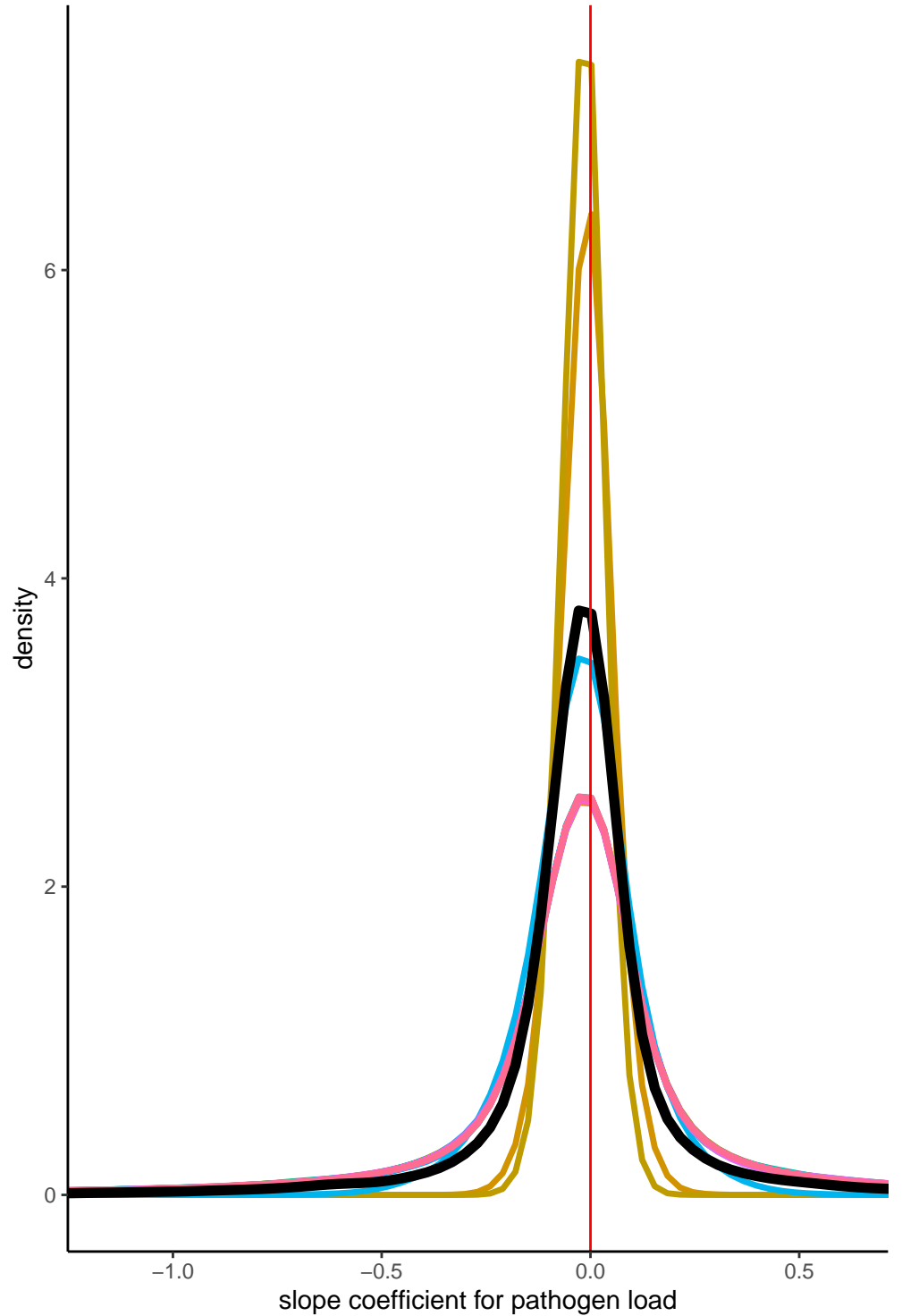
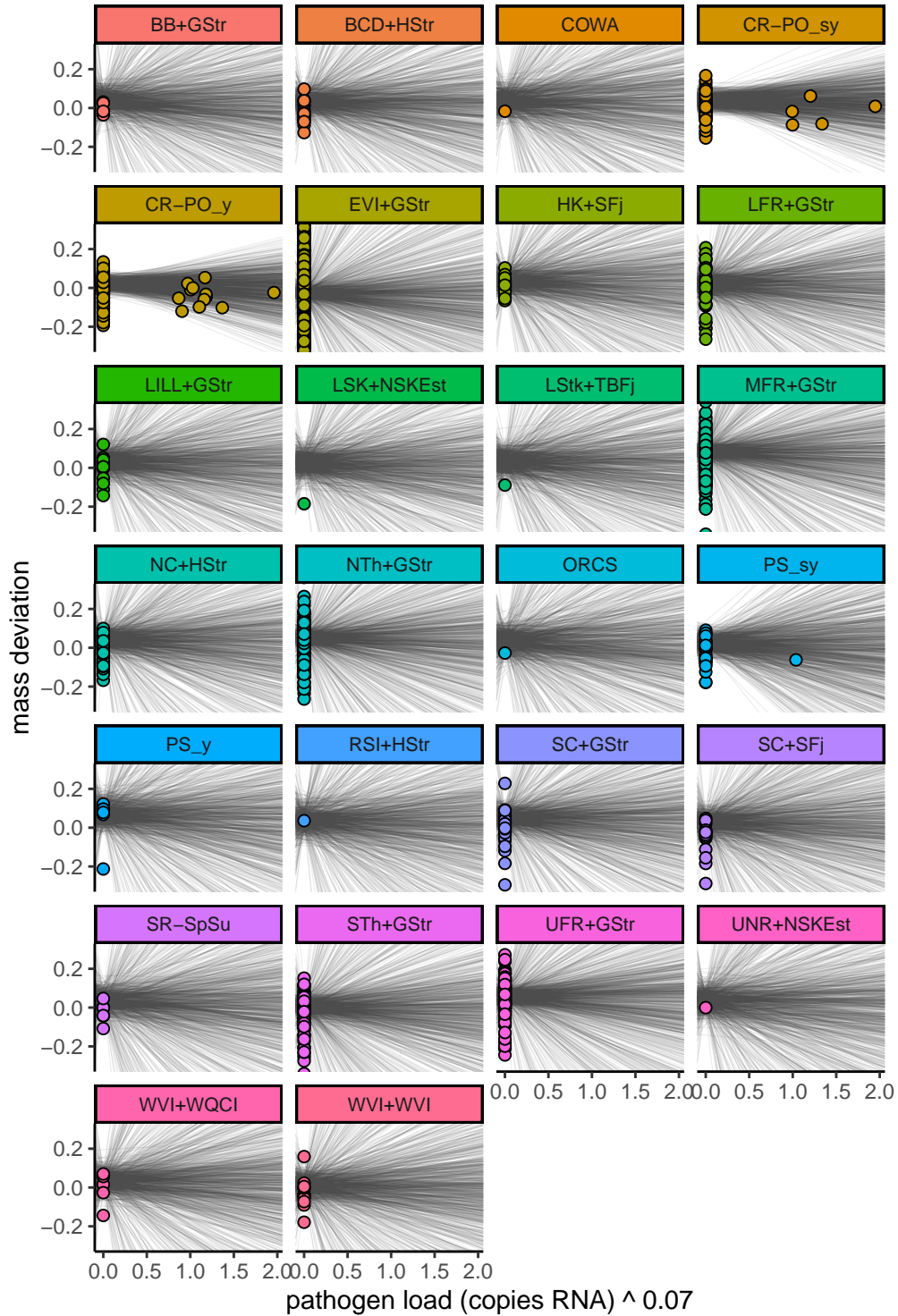
Myxobolus arcticus SpSu



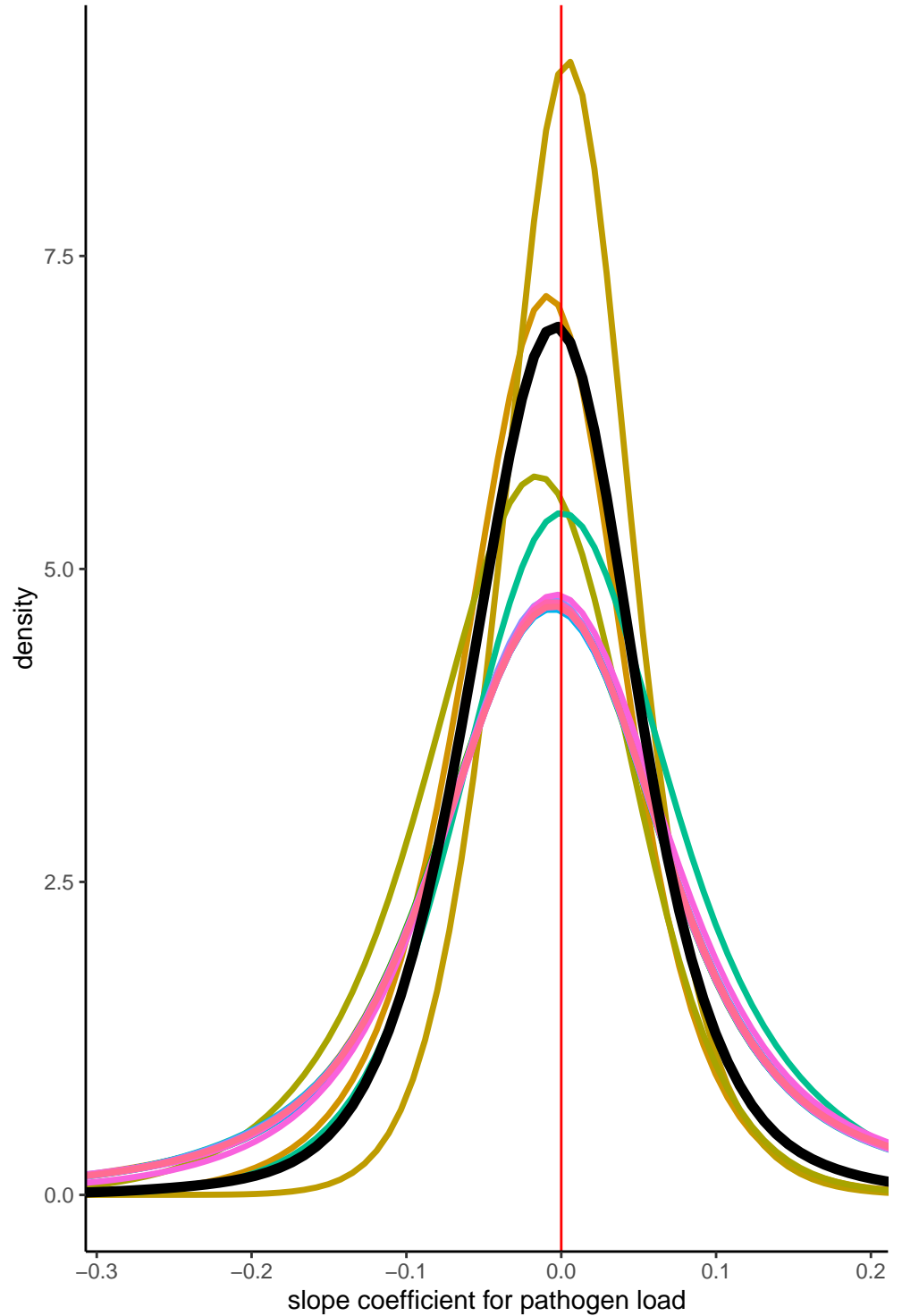
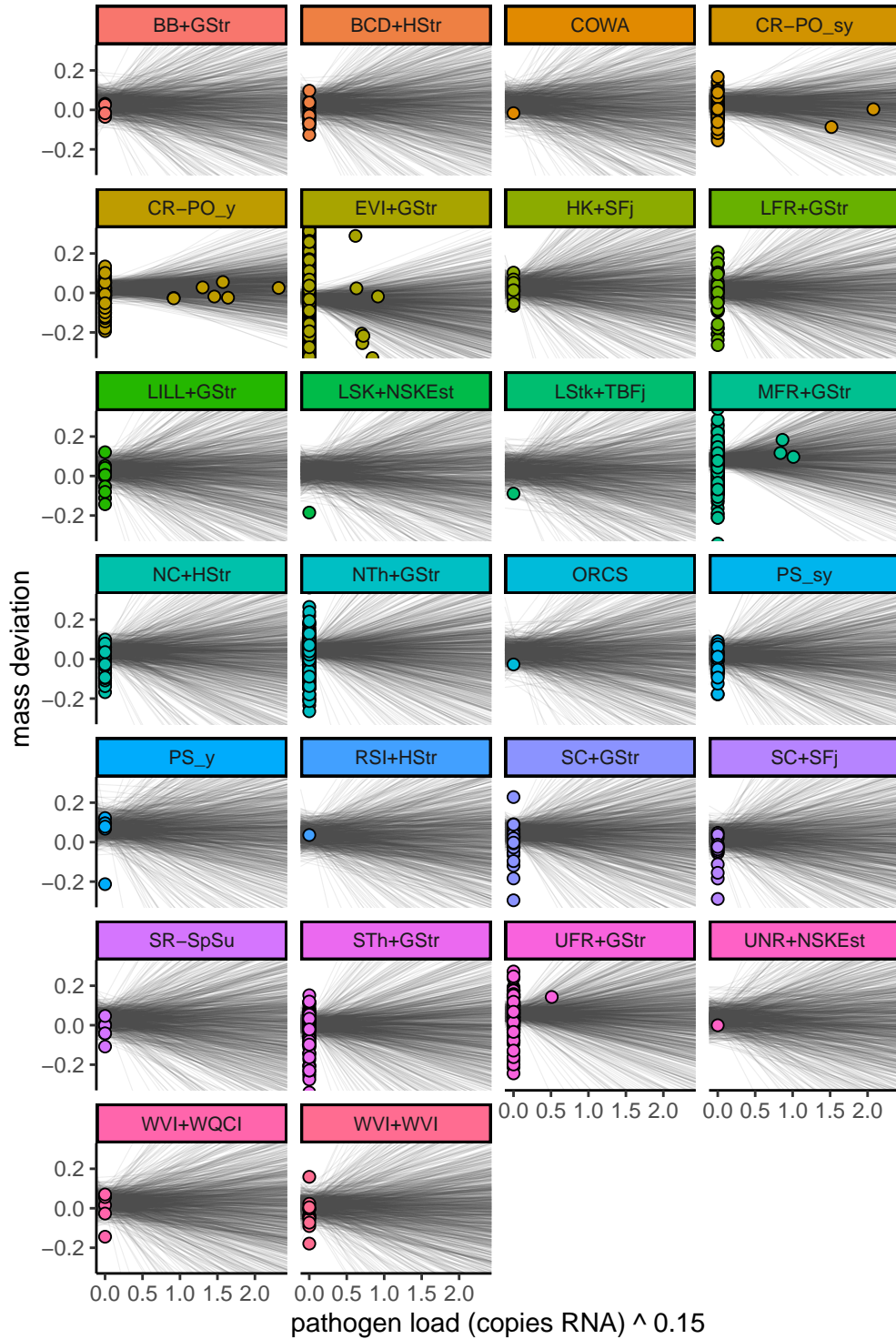
Myxobolus arcticus FaWi



Myxobolus insidiosus SpSu

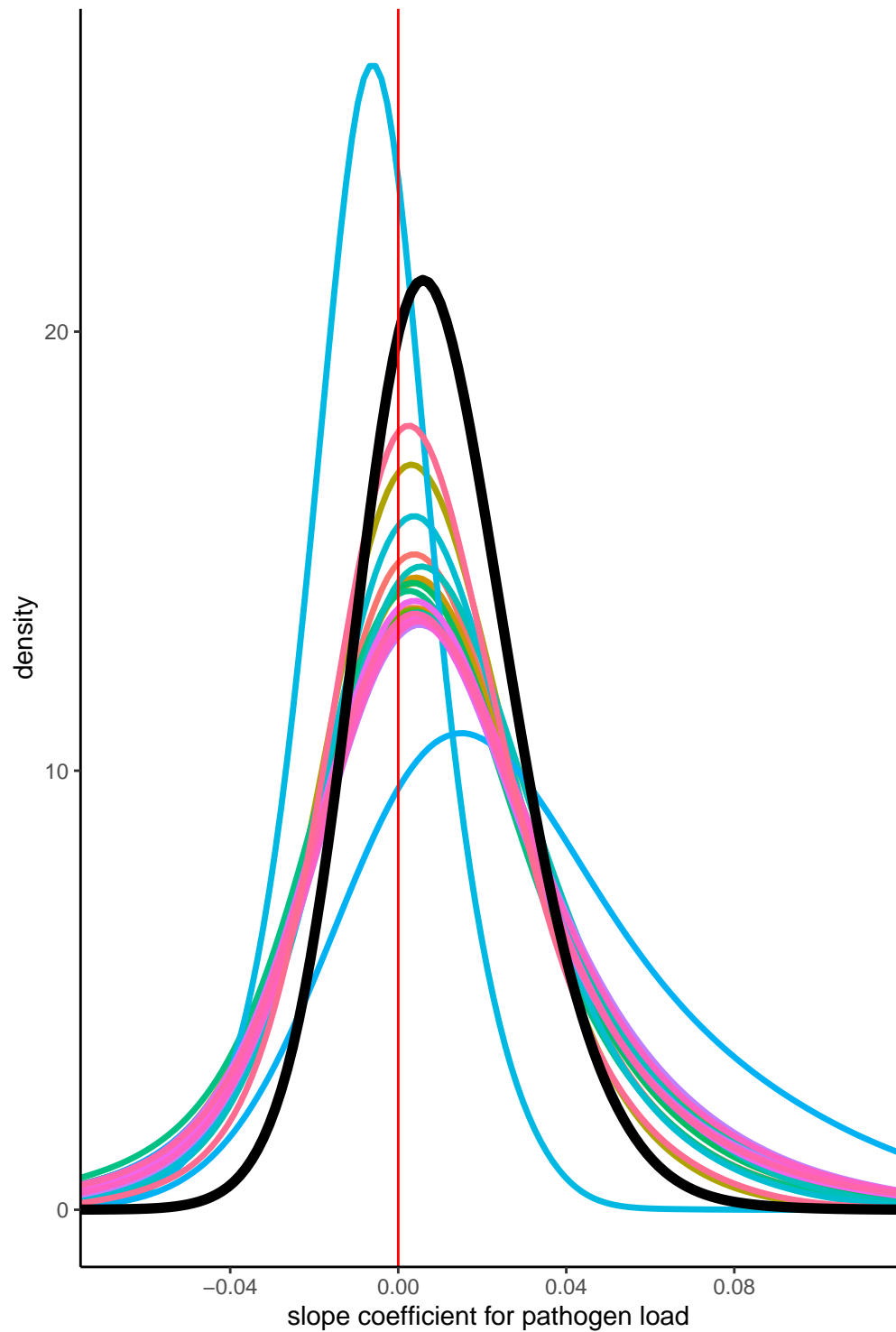
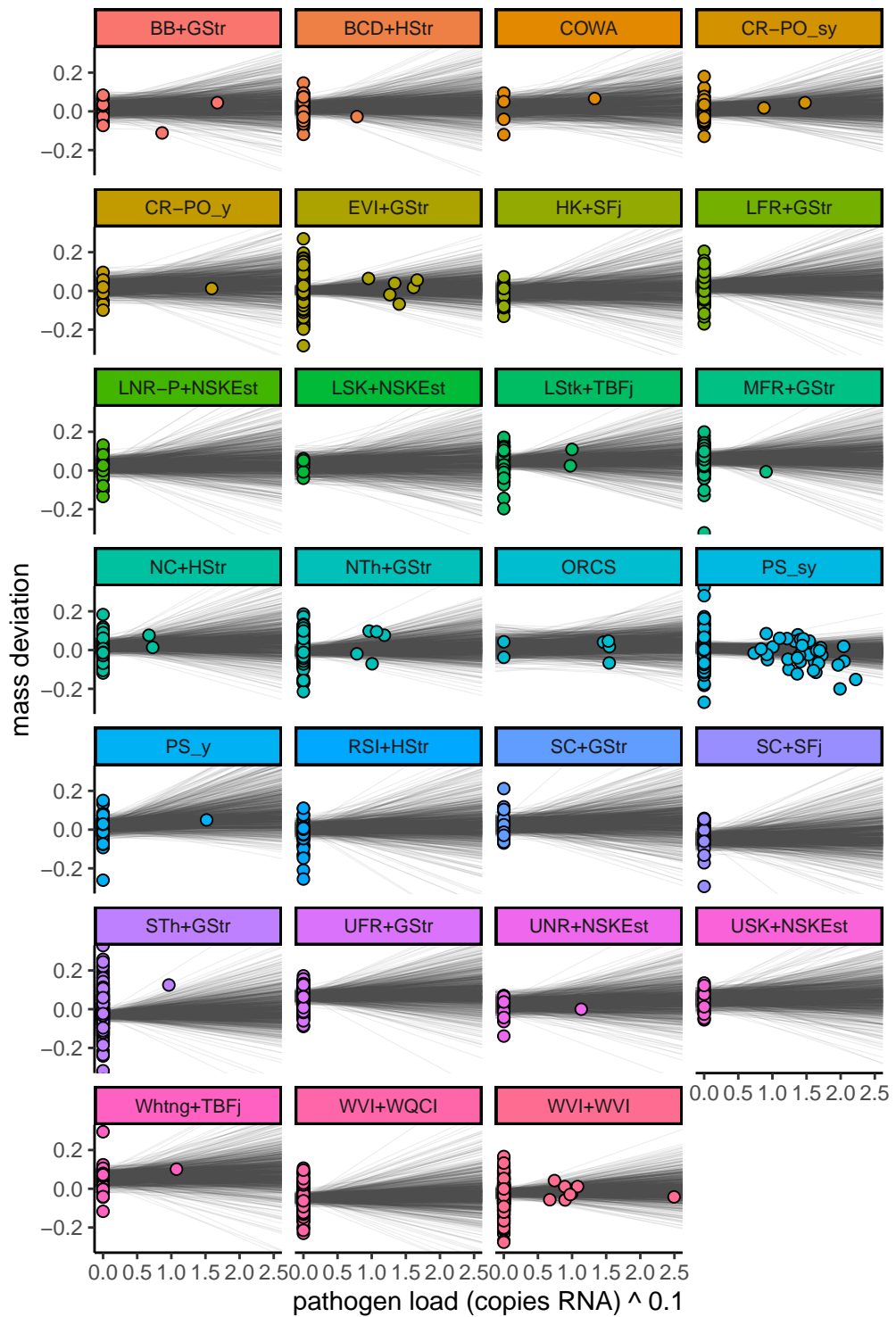


Nanophyetus salmincola SpSu

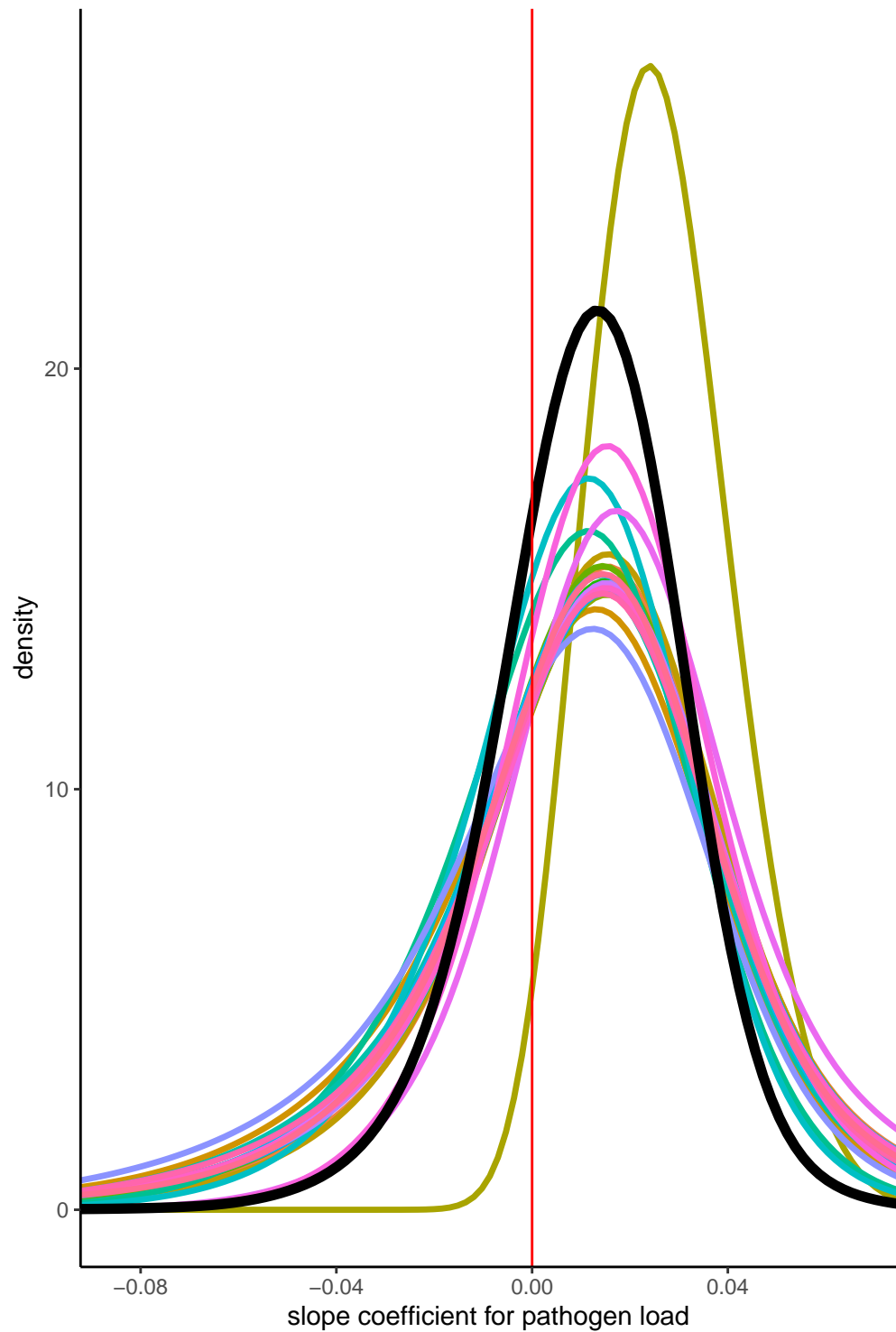
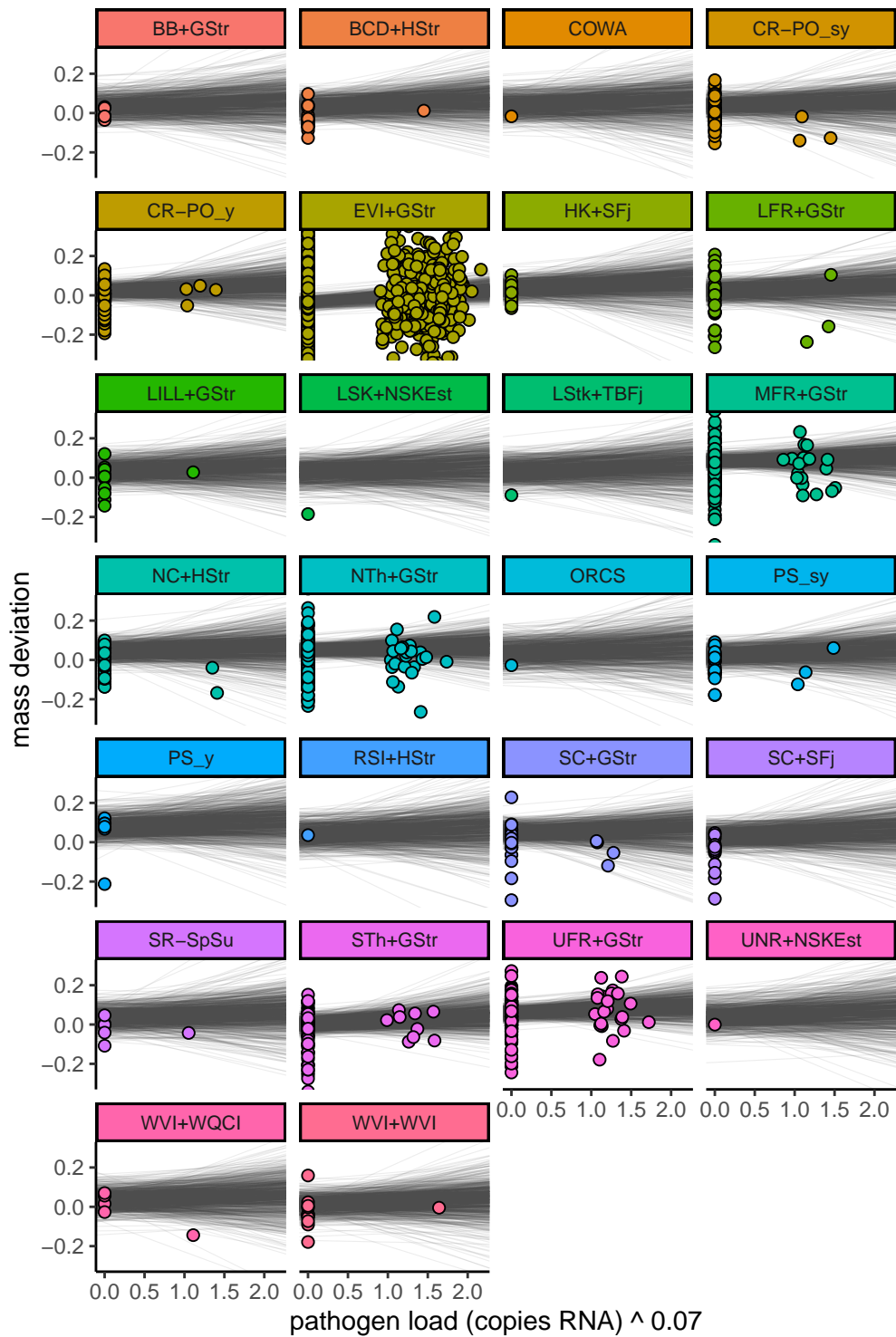




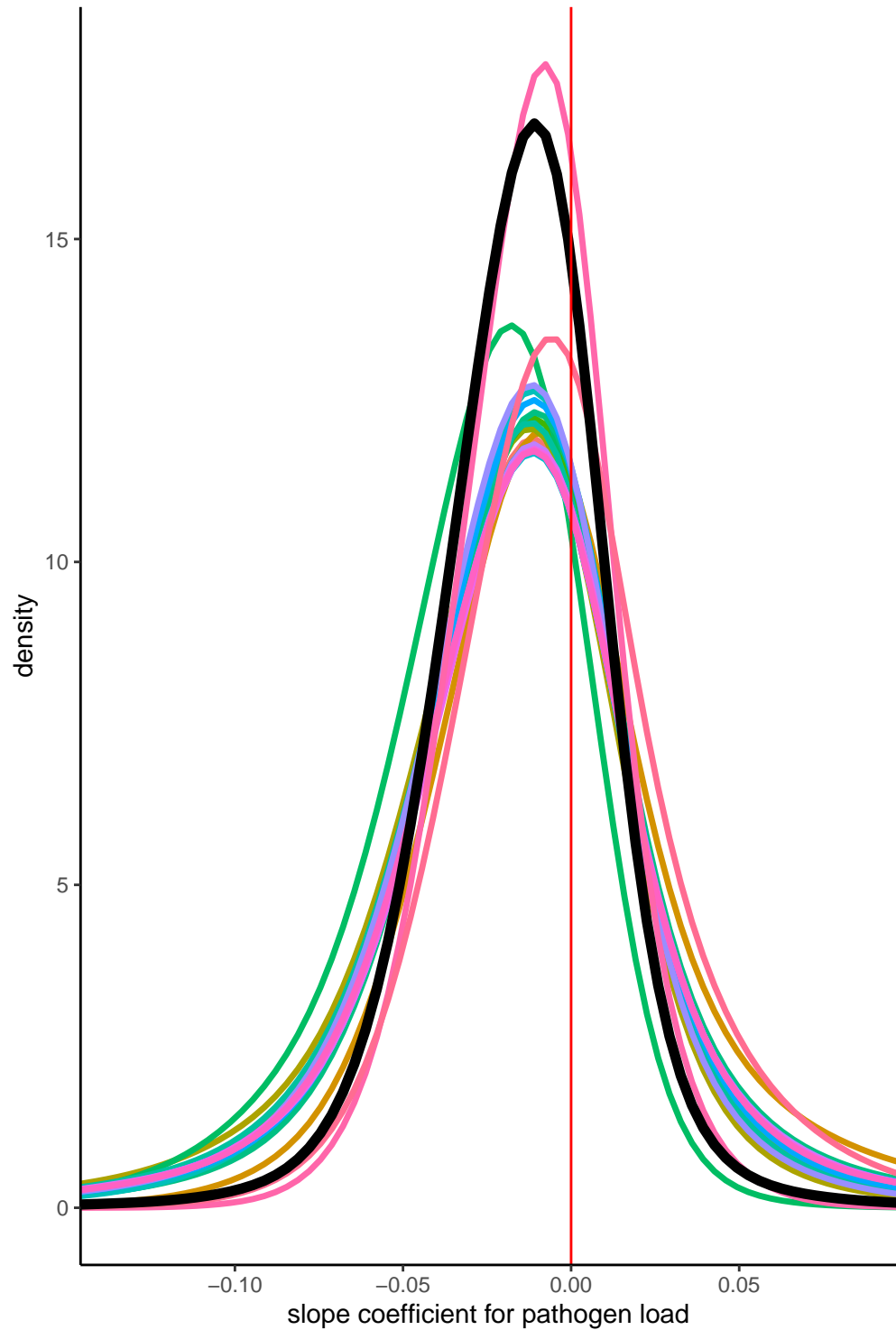
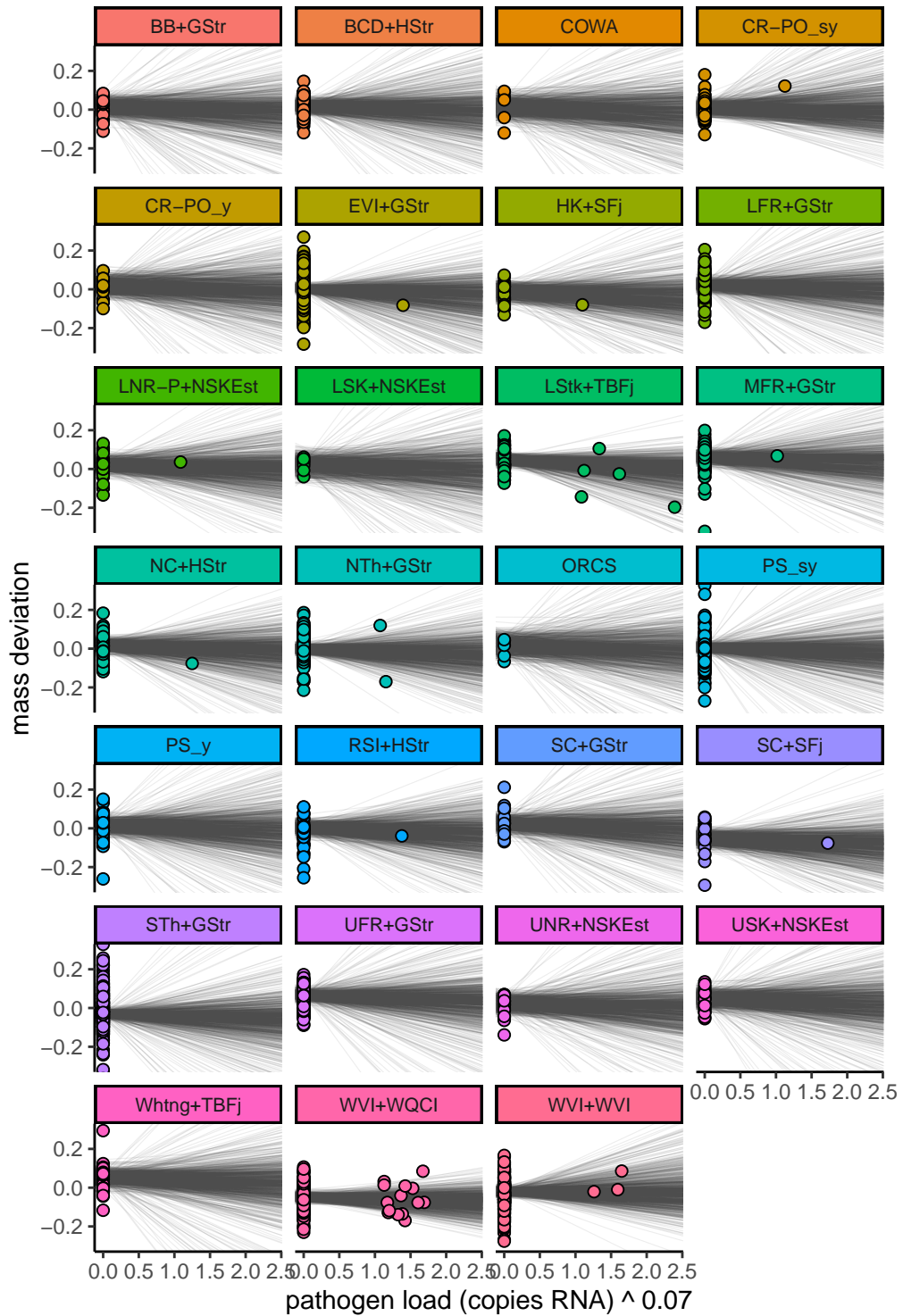
Nanophyetus salmincola FaWi



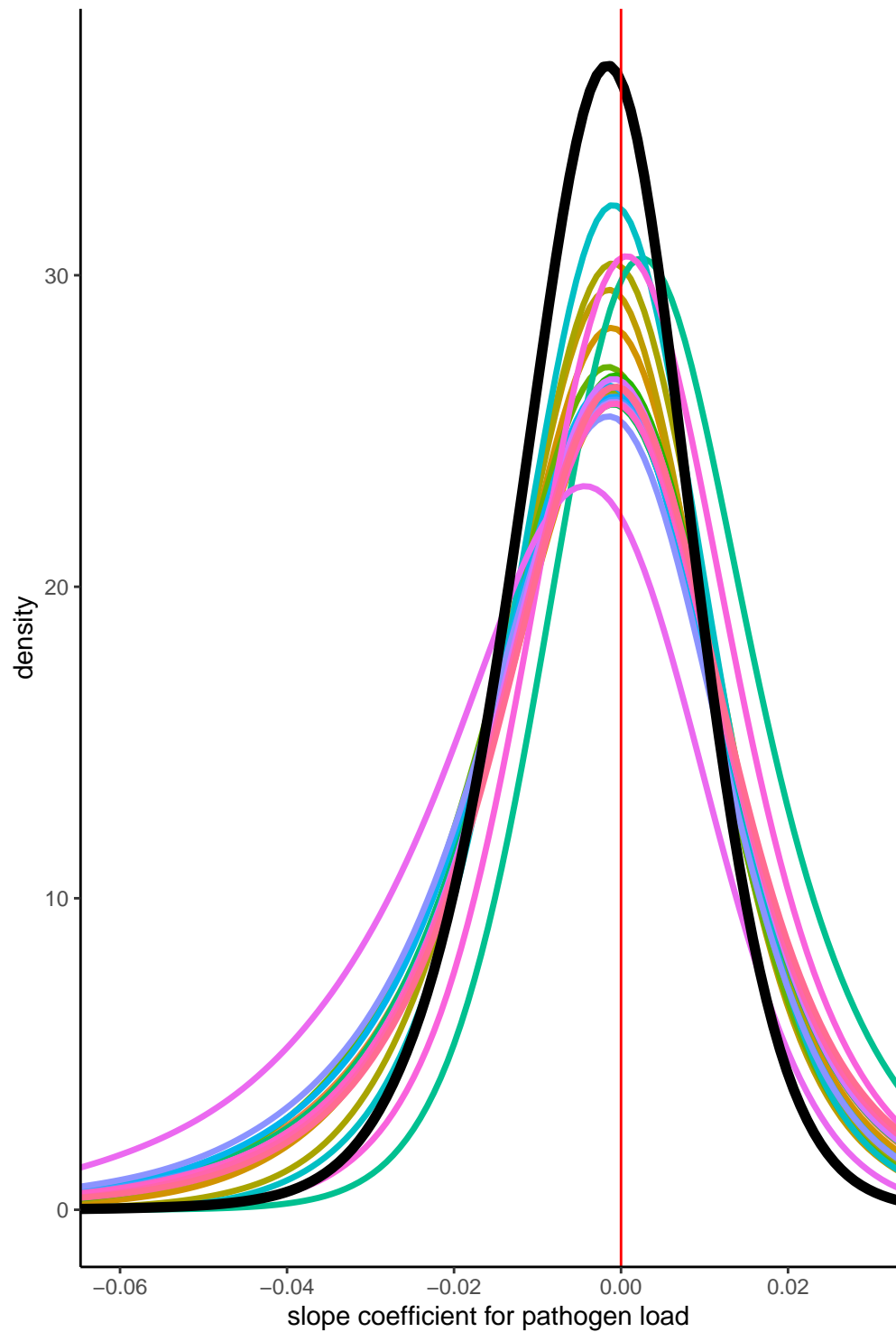
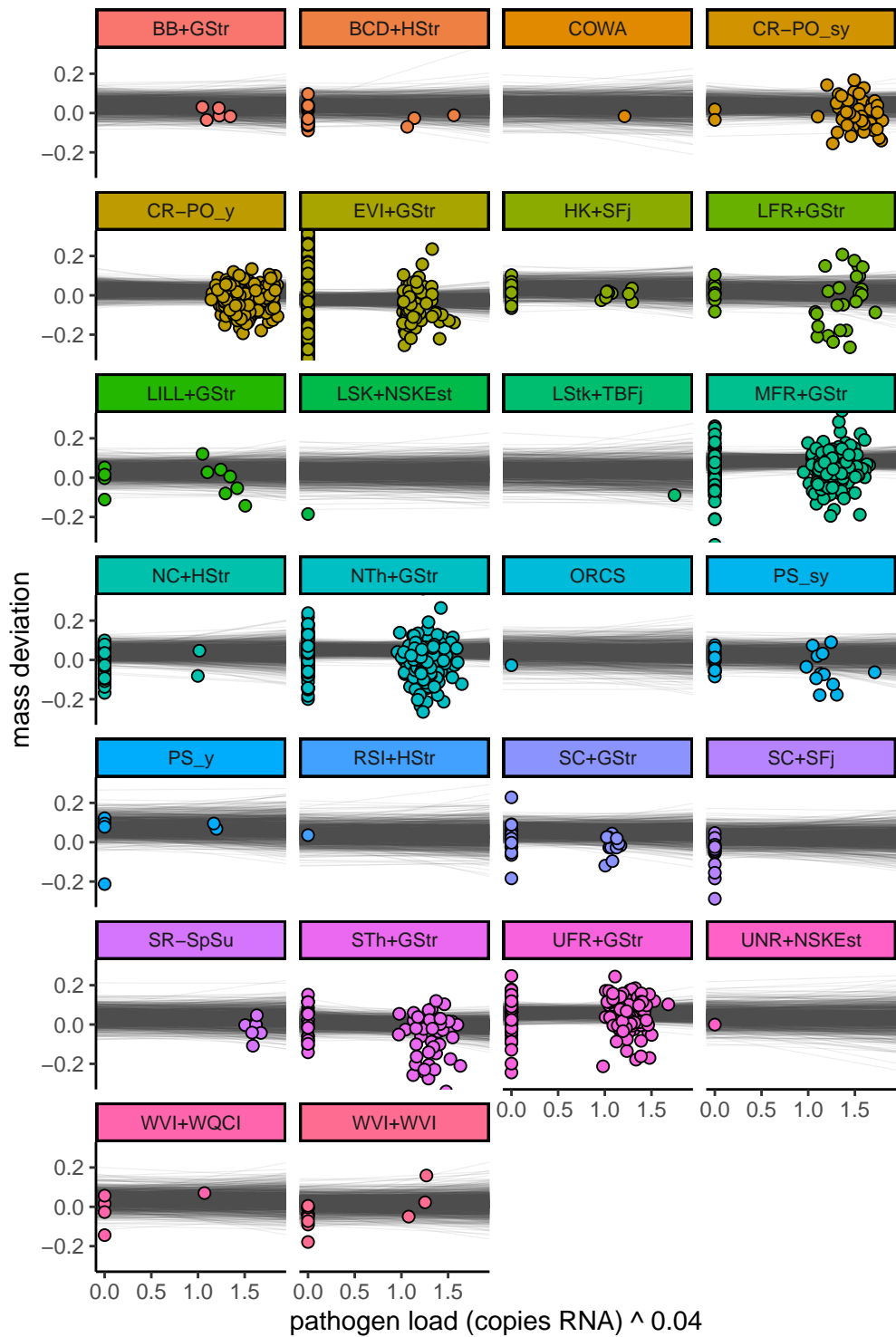
Parvicapsula kabatai SpSu



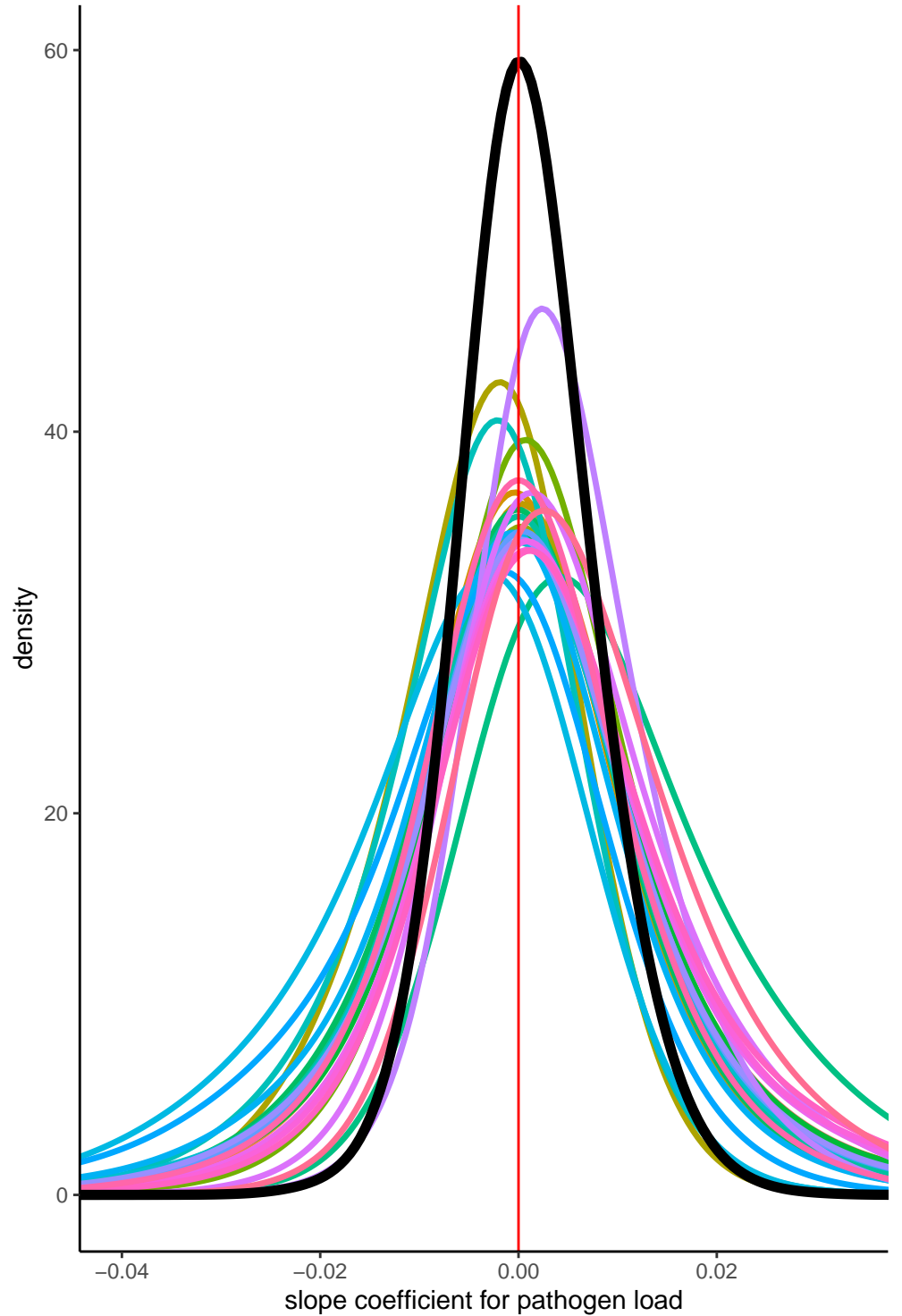
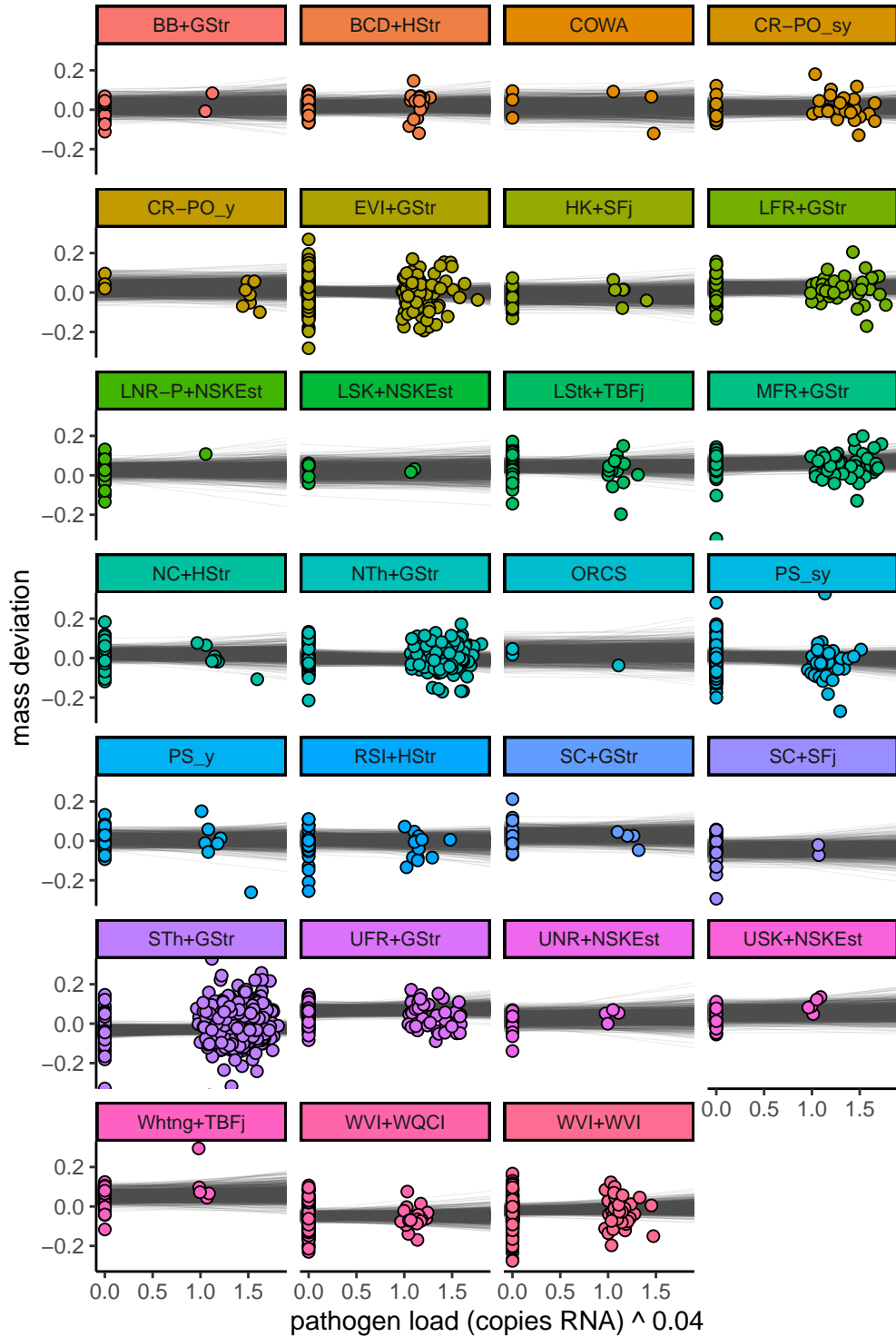
Parvicapsula kabatai FaWi



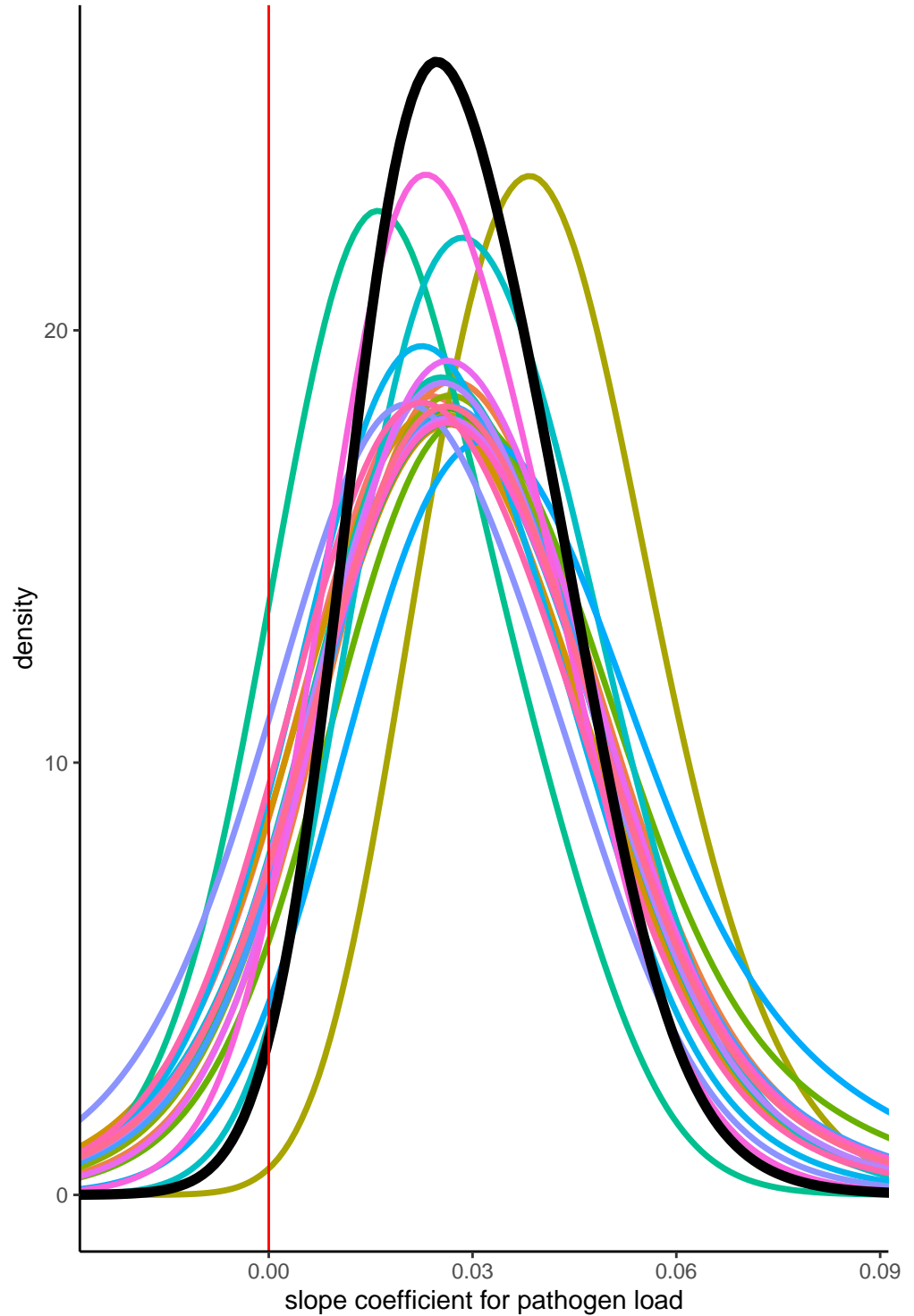
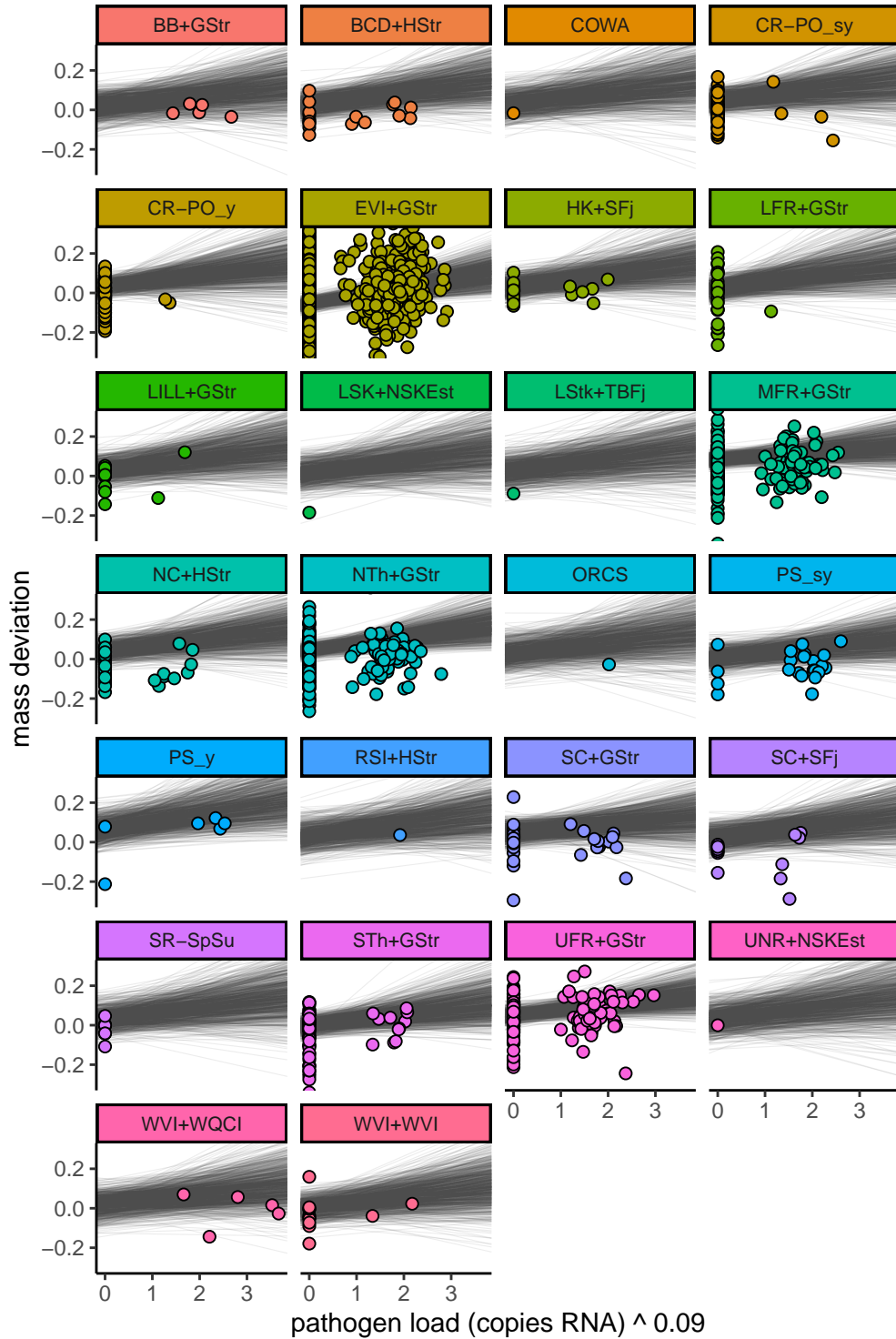
Parvicapsula minibicornis SpSu



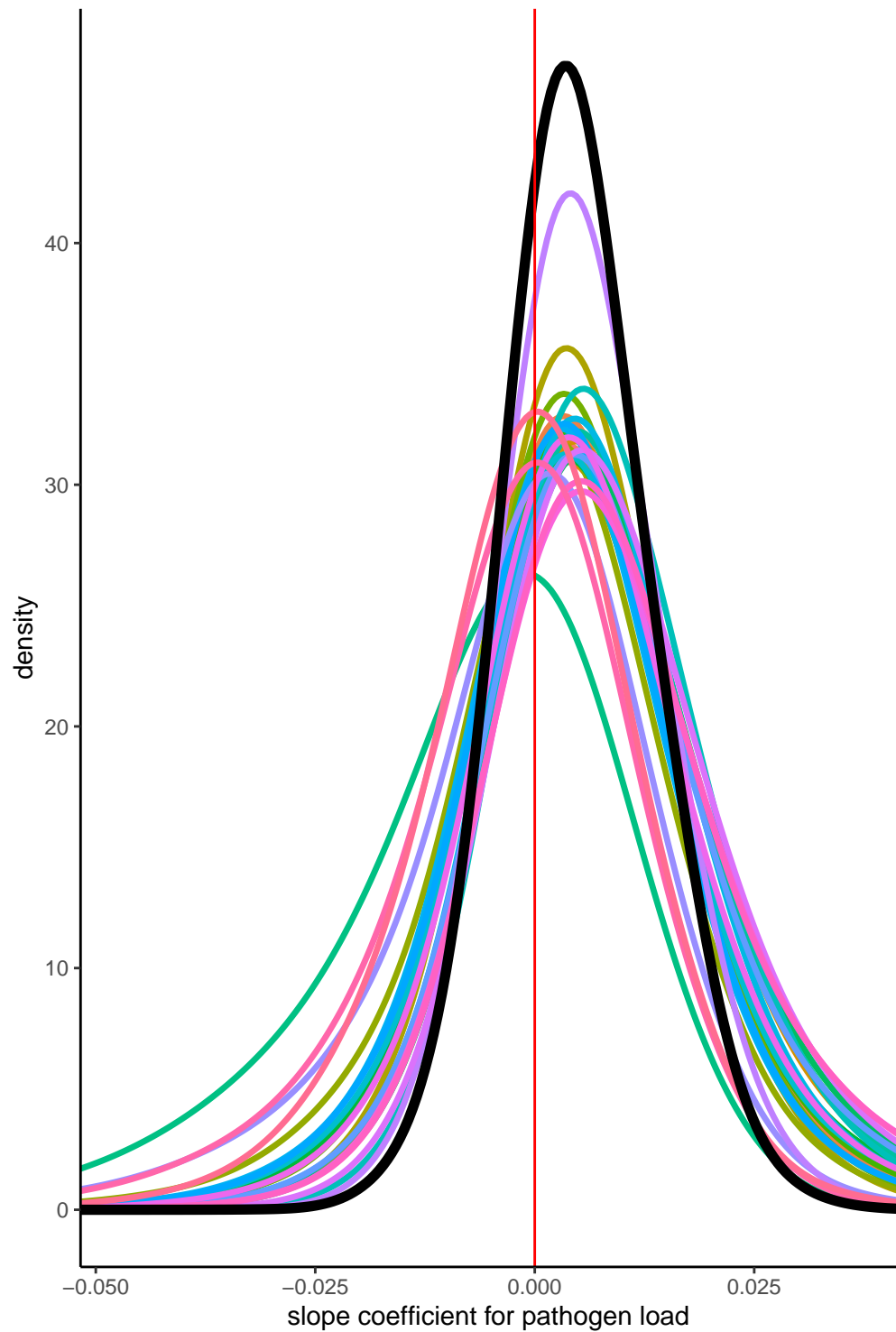
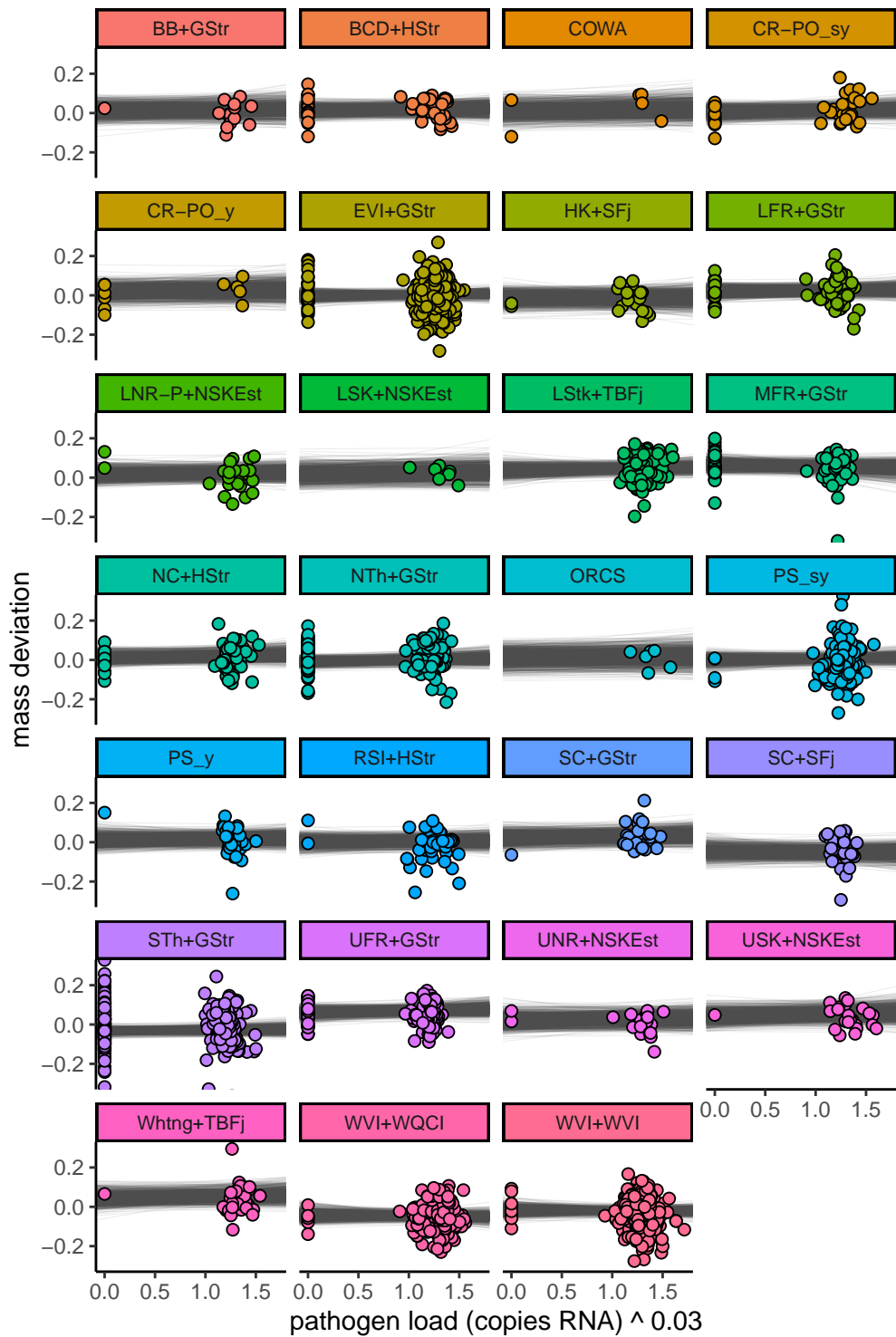
Parvicapsula minibicornis FaWi



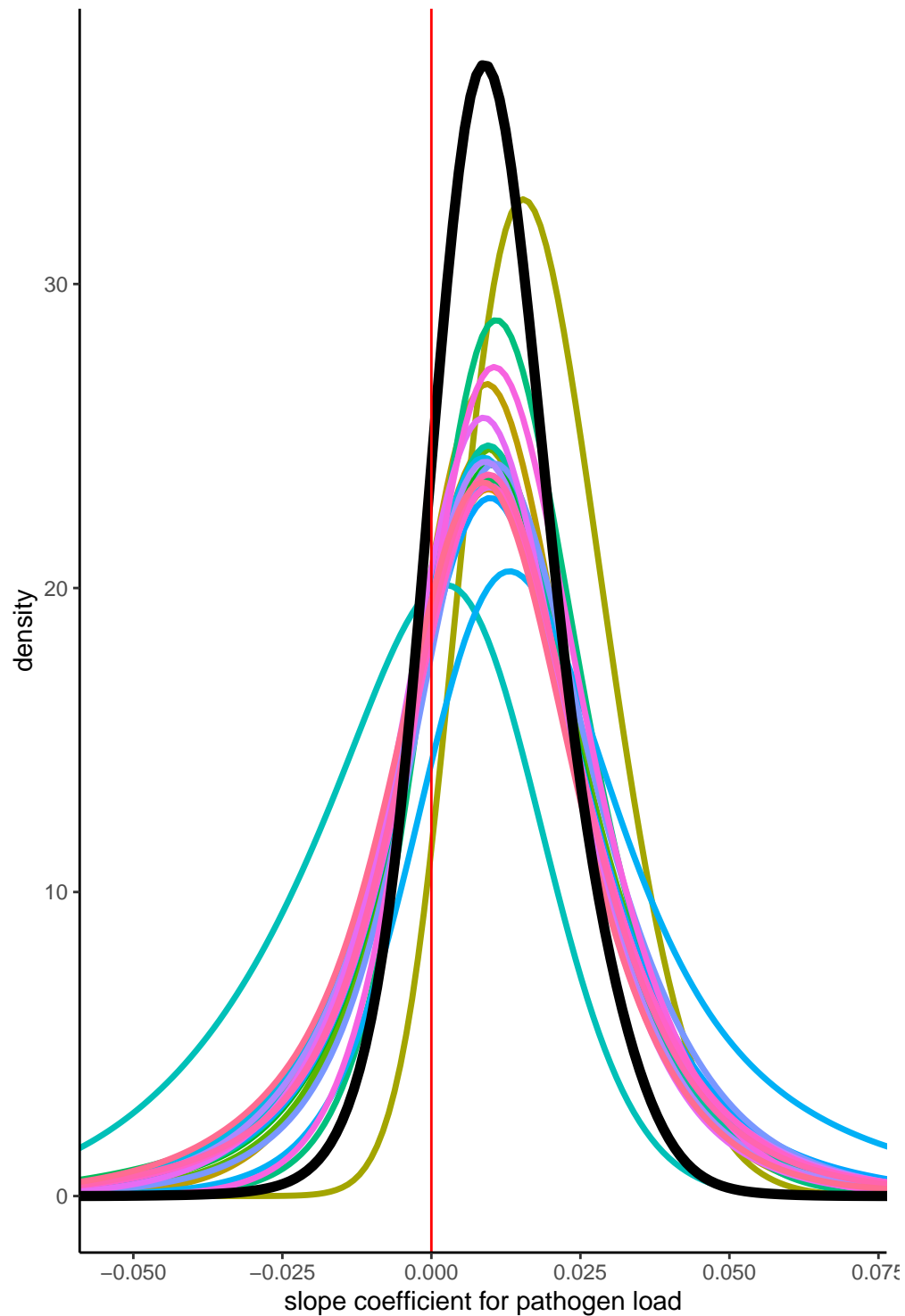
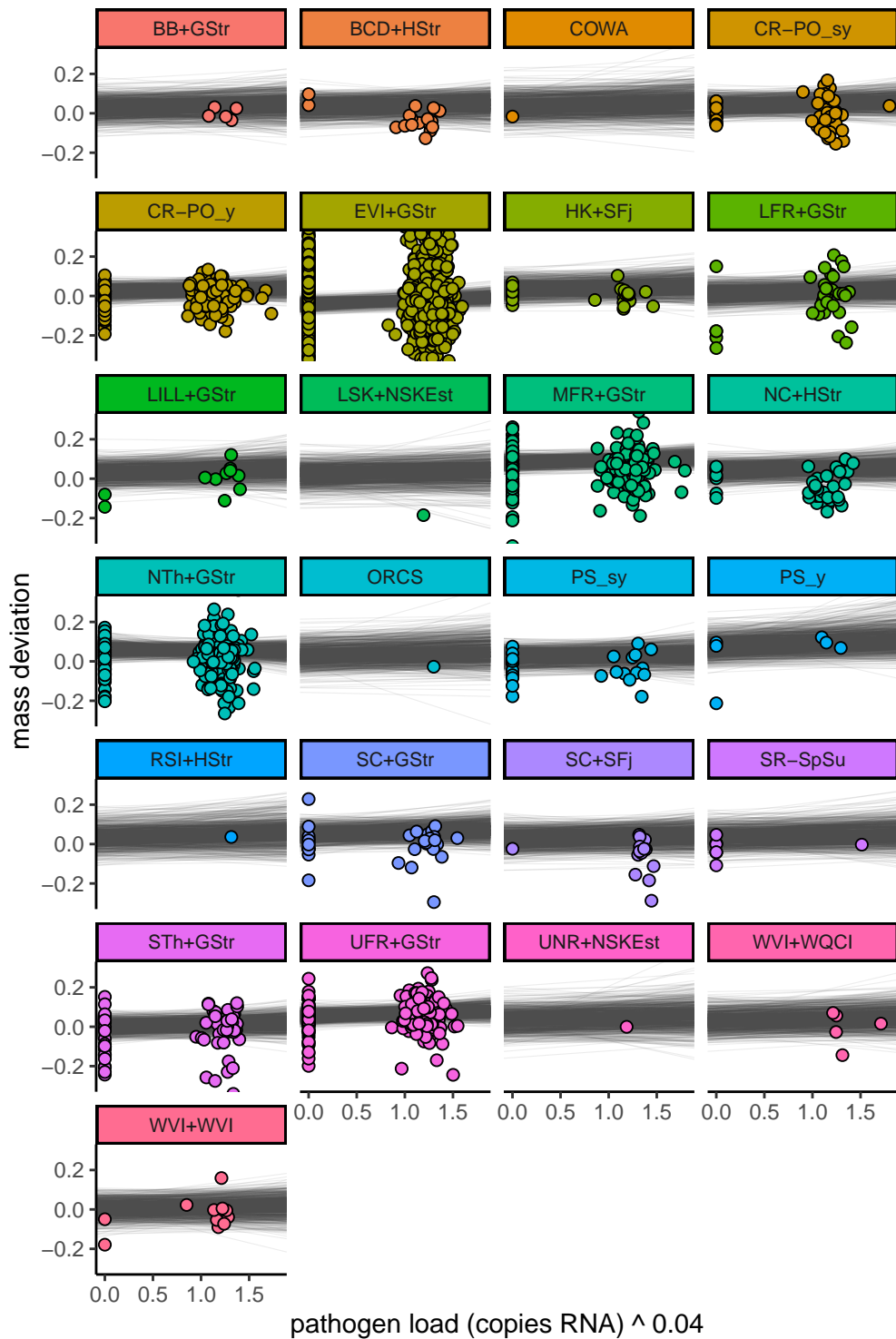
Parvicapsula pseudobranchicola SpSu



Parvicapsula pseudobranchicola FaWi

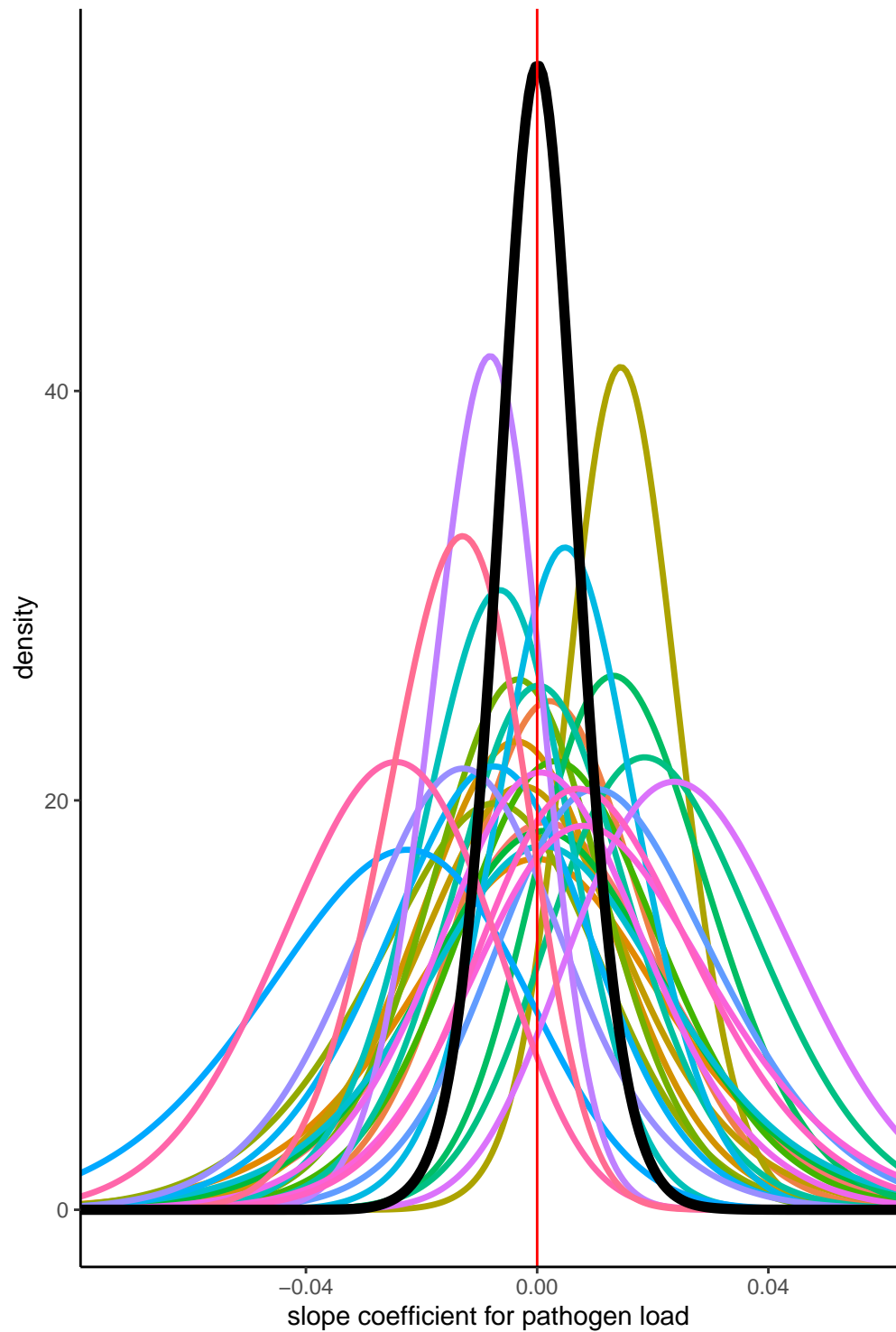
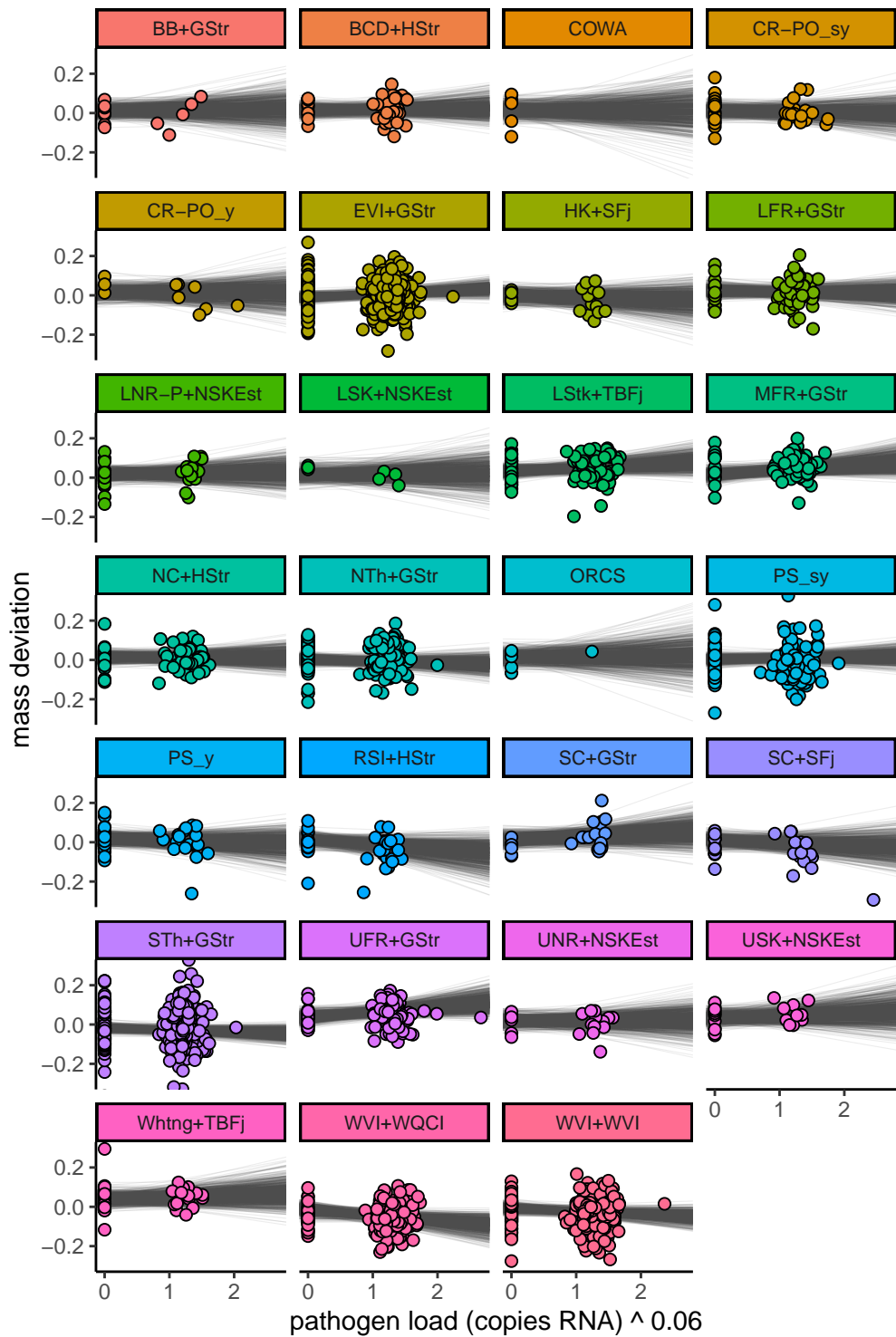


Paranucleospora theridion SpSu

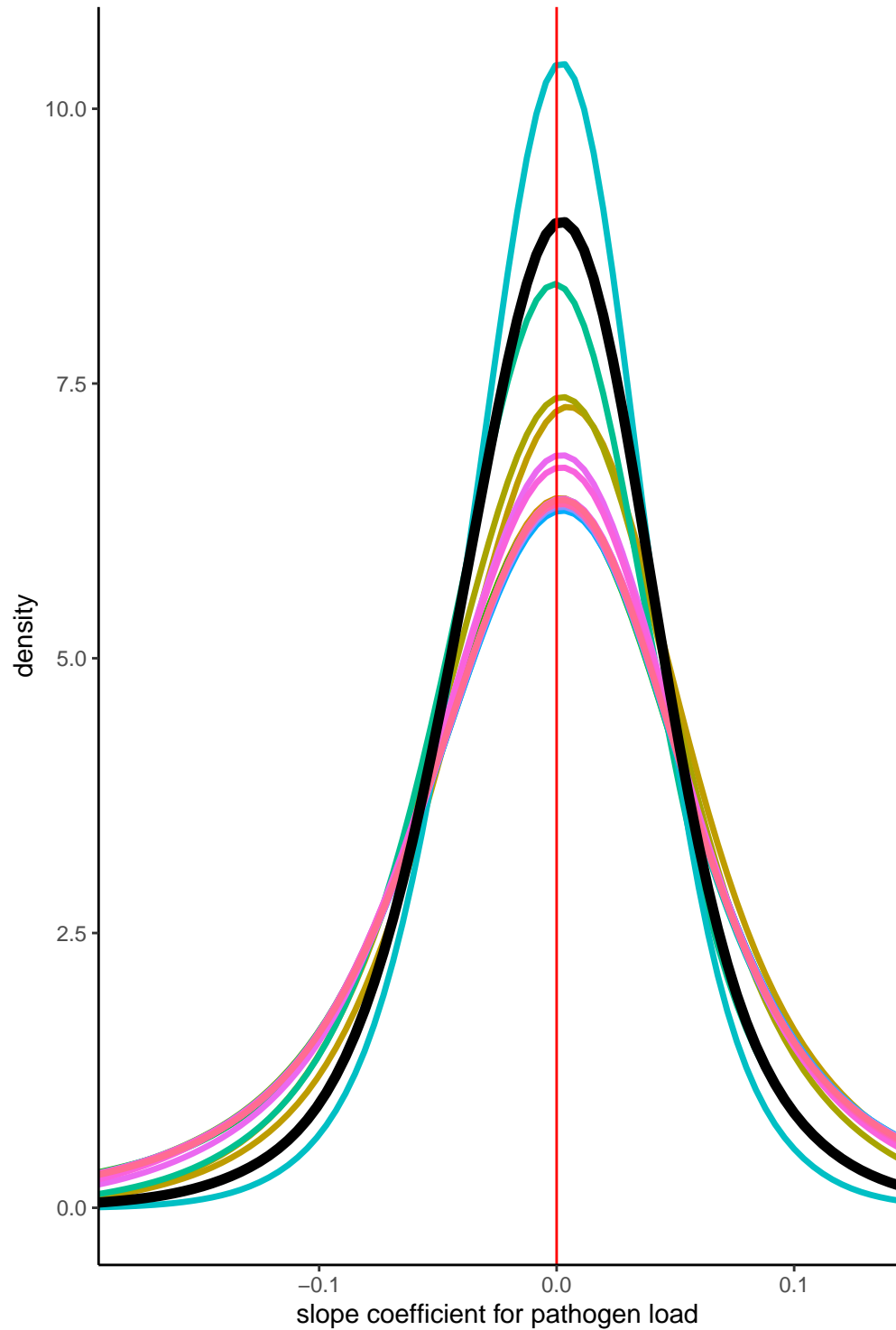
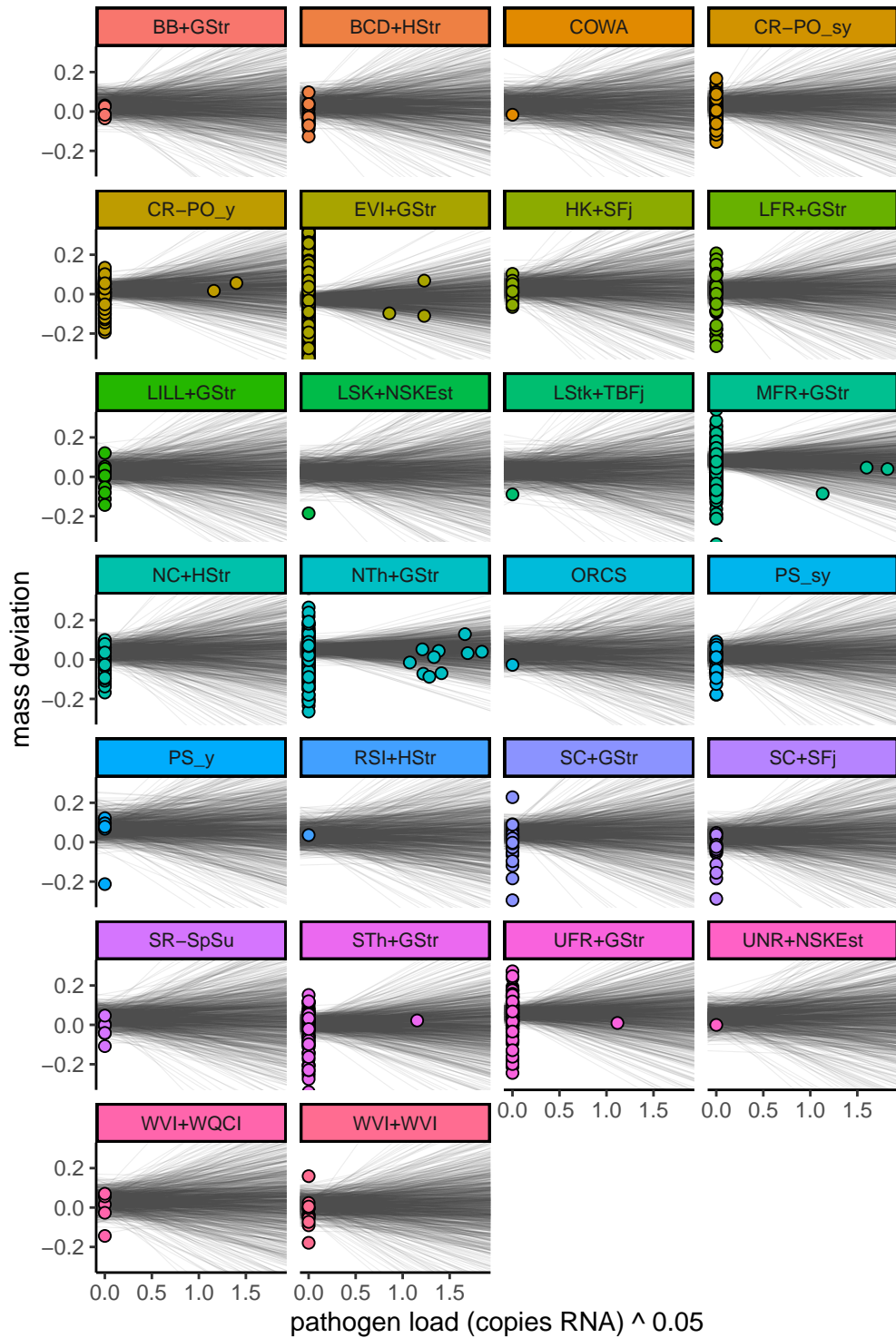




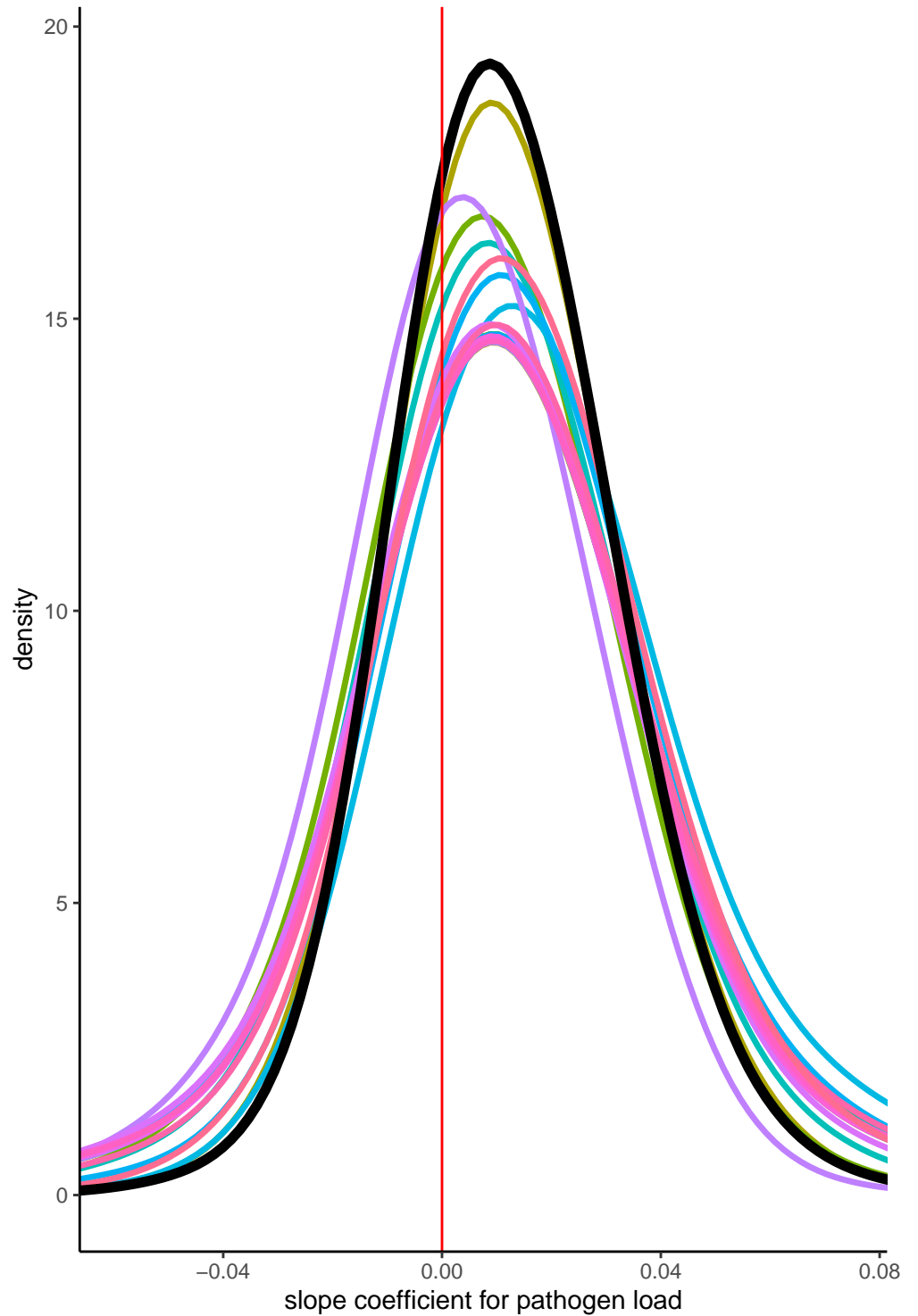
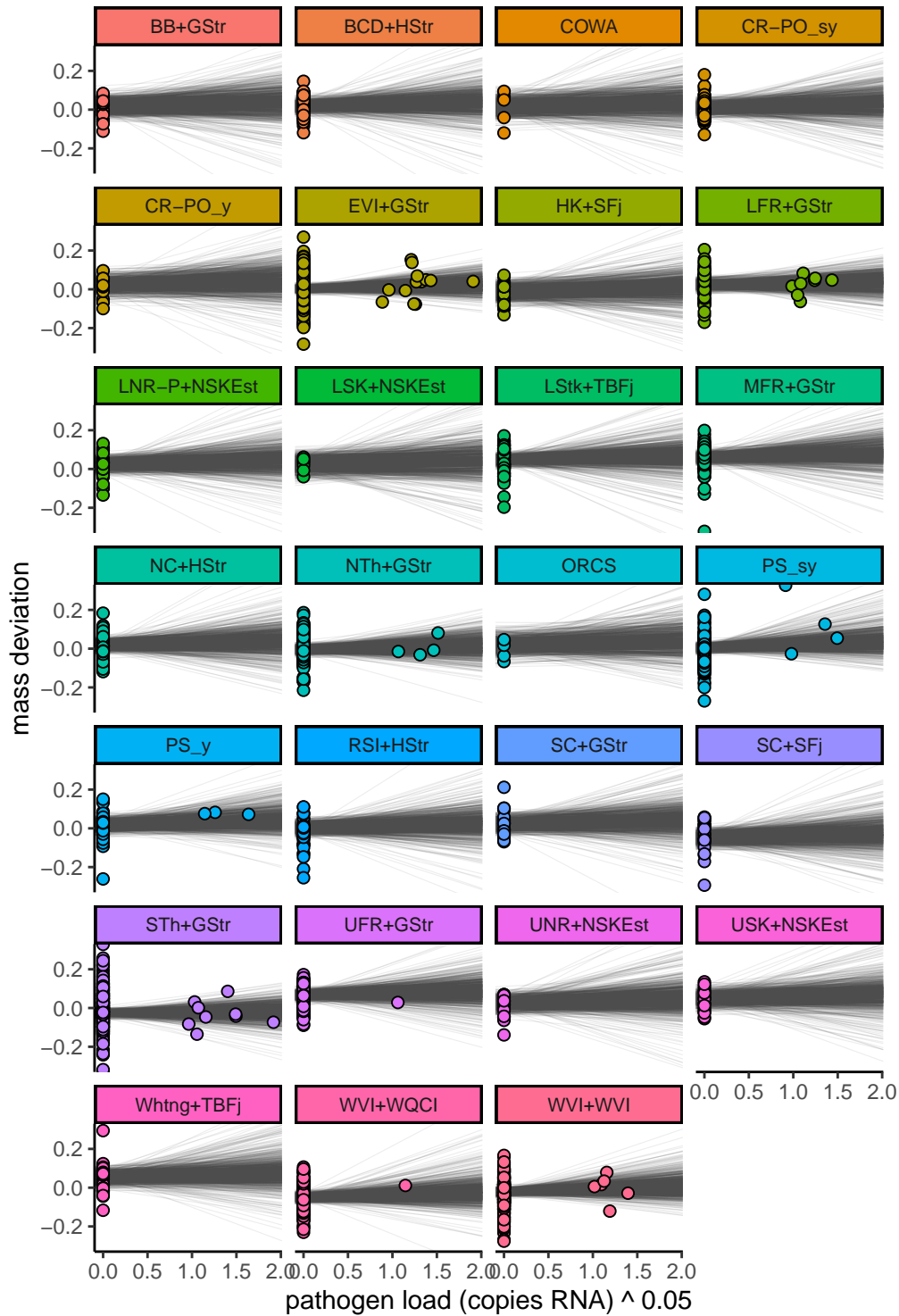
Paranucleospora theridion FaWi



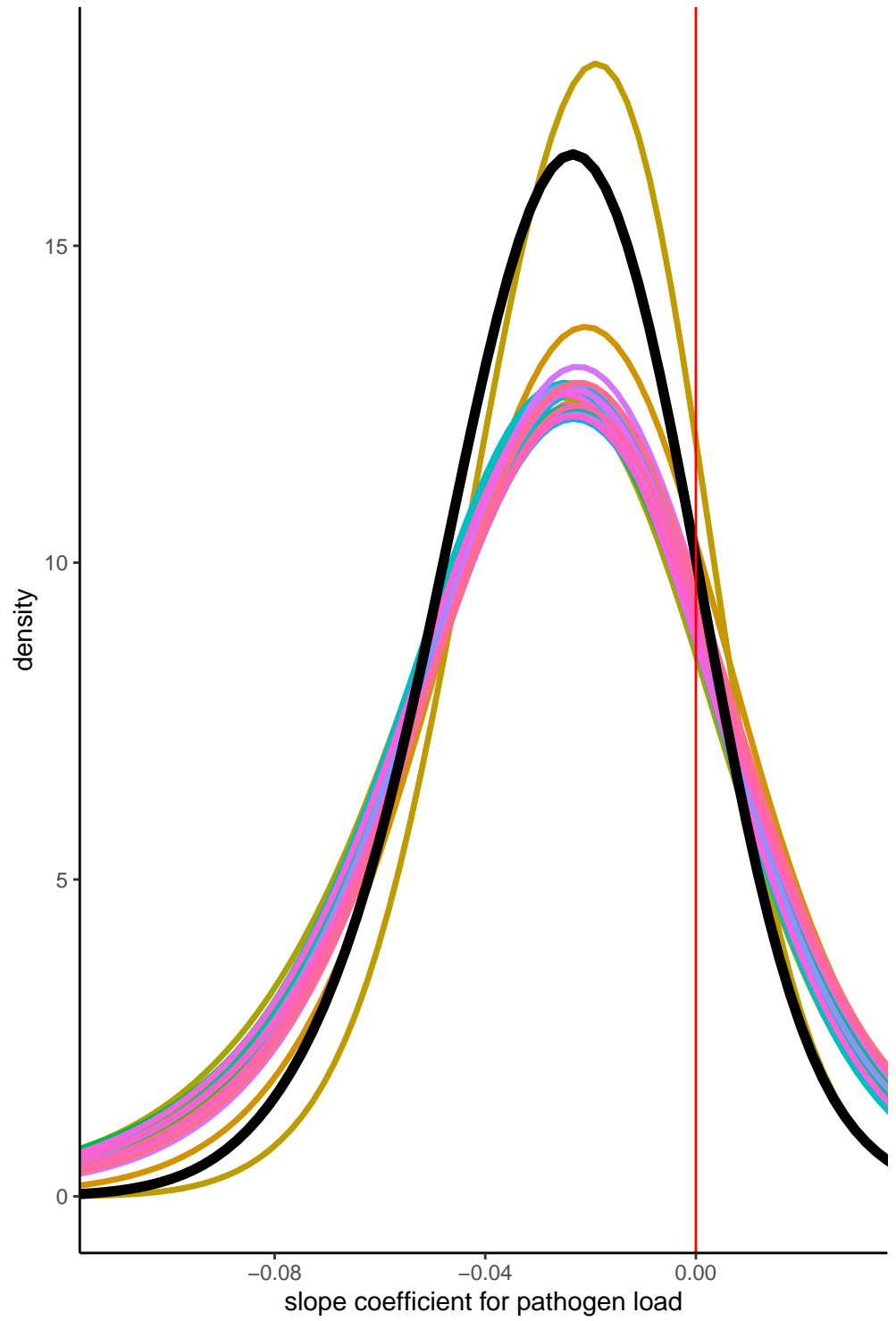
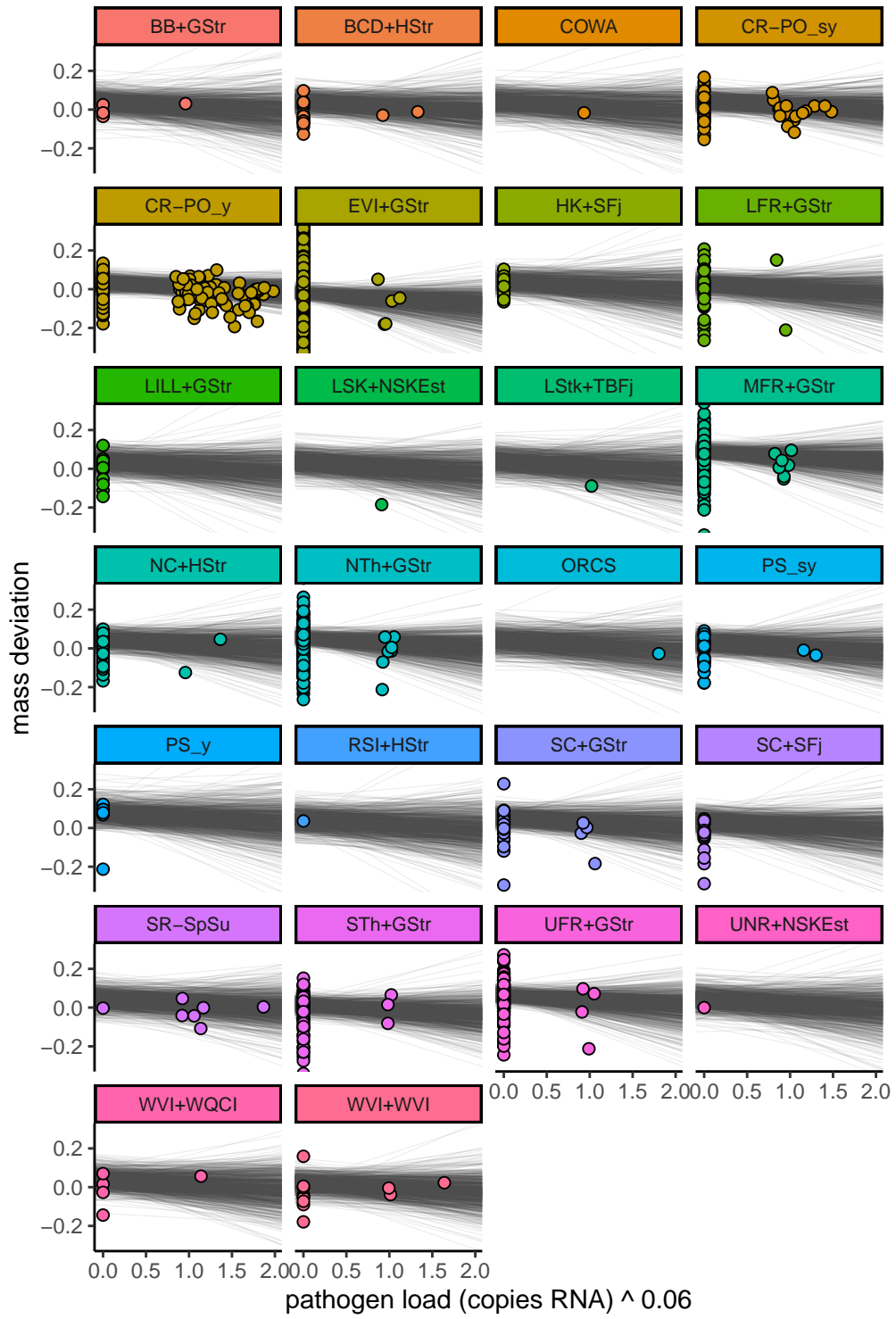
Candidatus *Piscichlamydia salmonis* SpSu



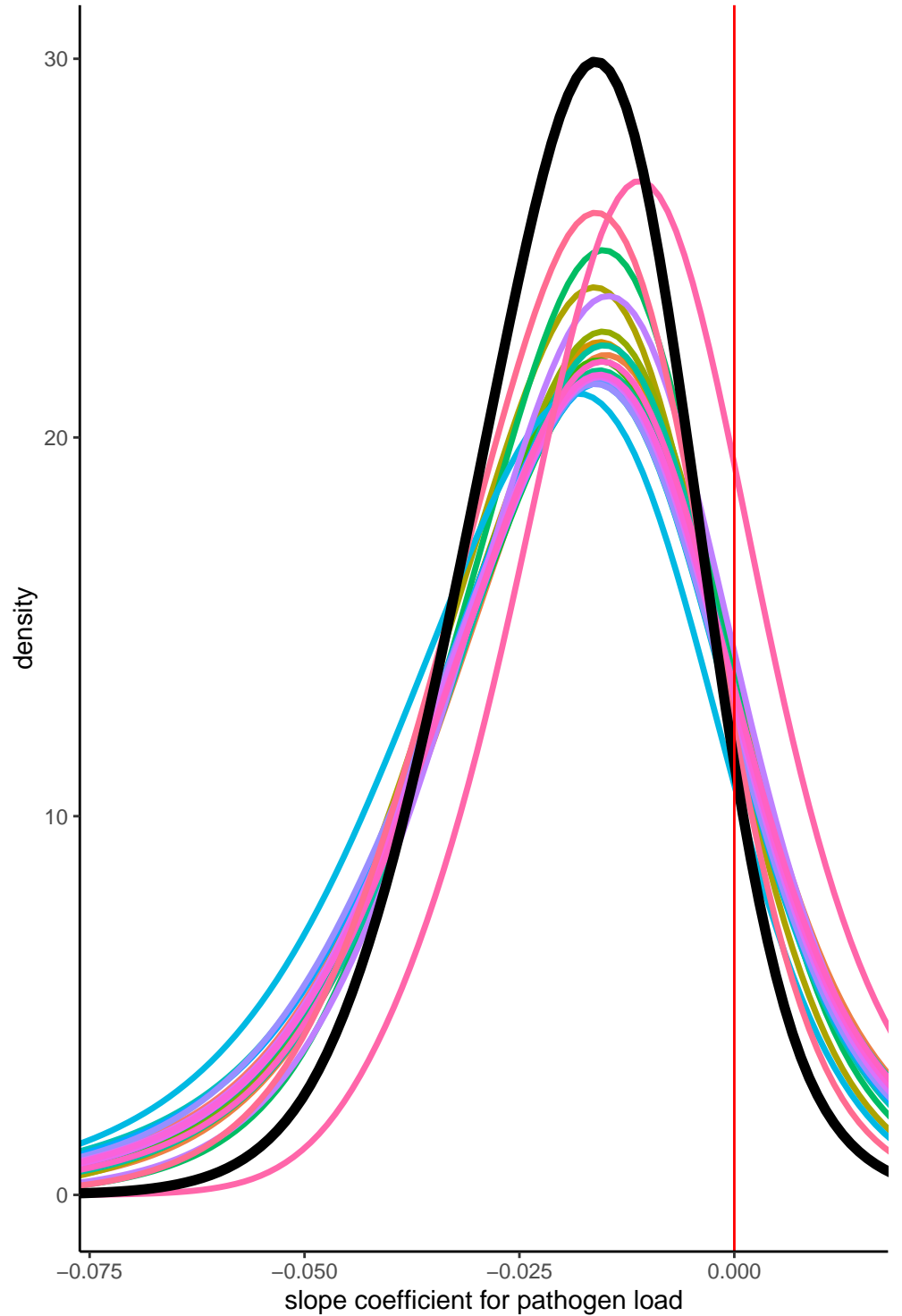
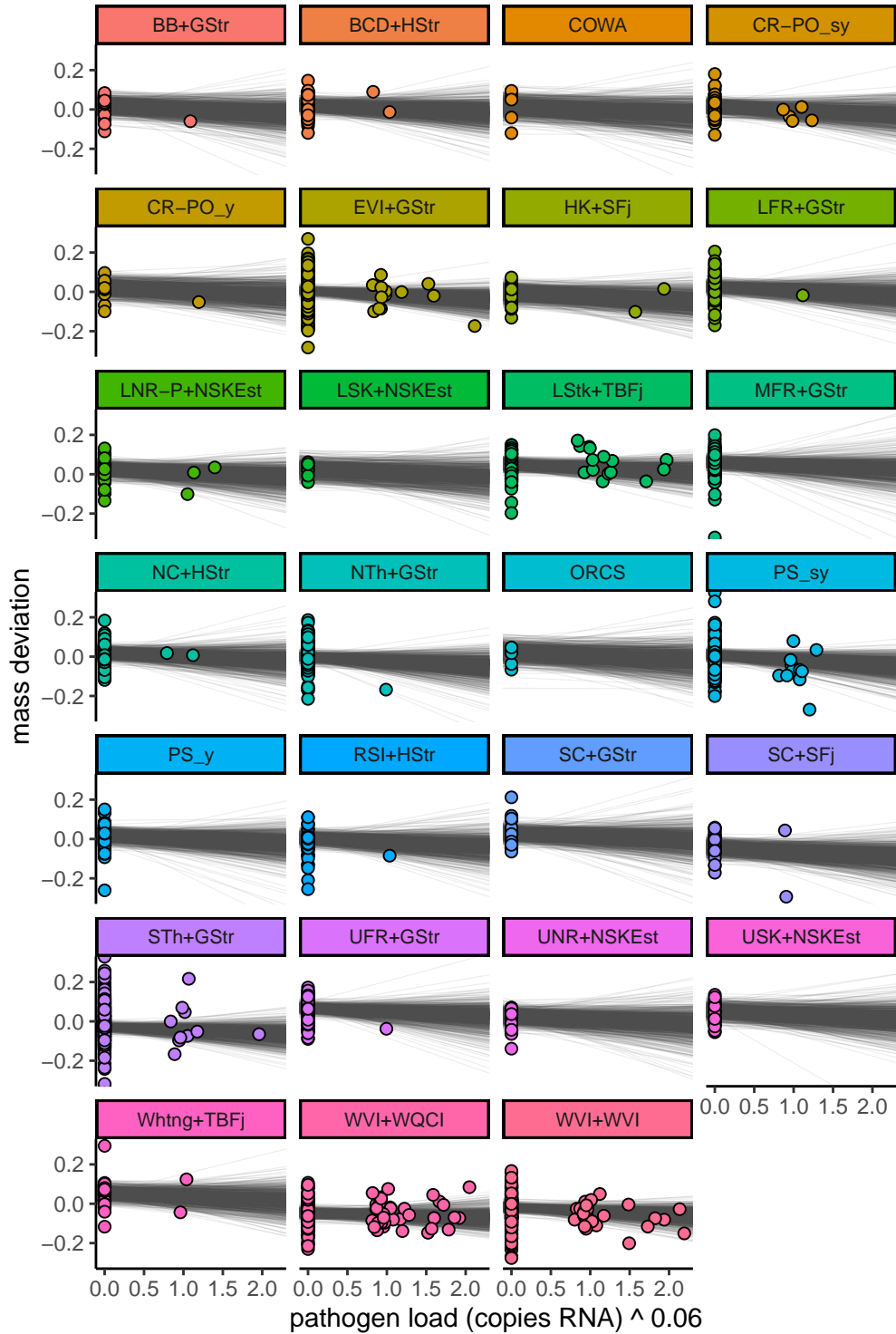
*Piscirickettsia salmonis* FaWi



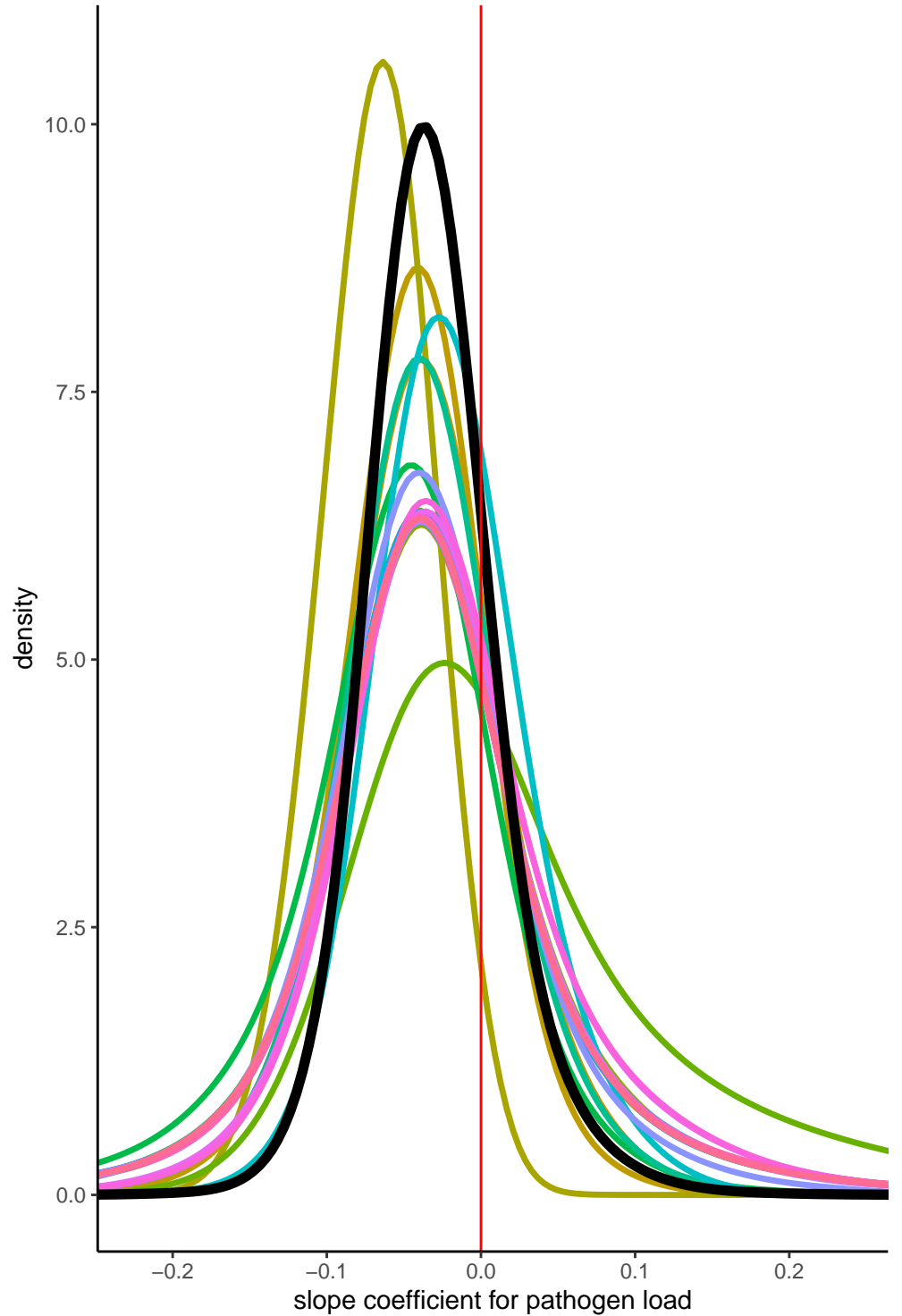
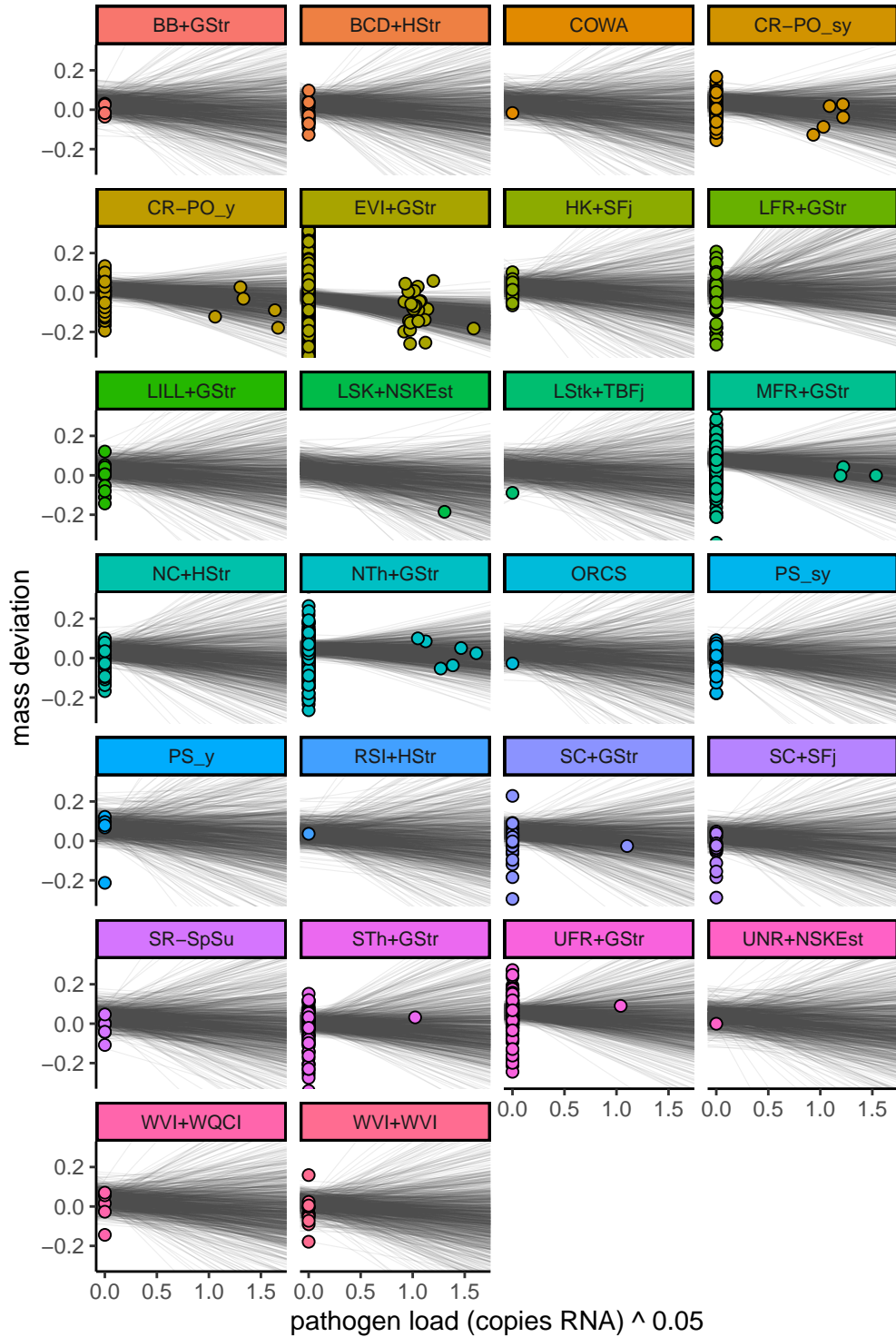
Piscine Orthoreovirus SpSu



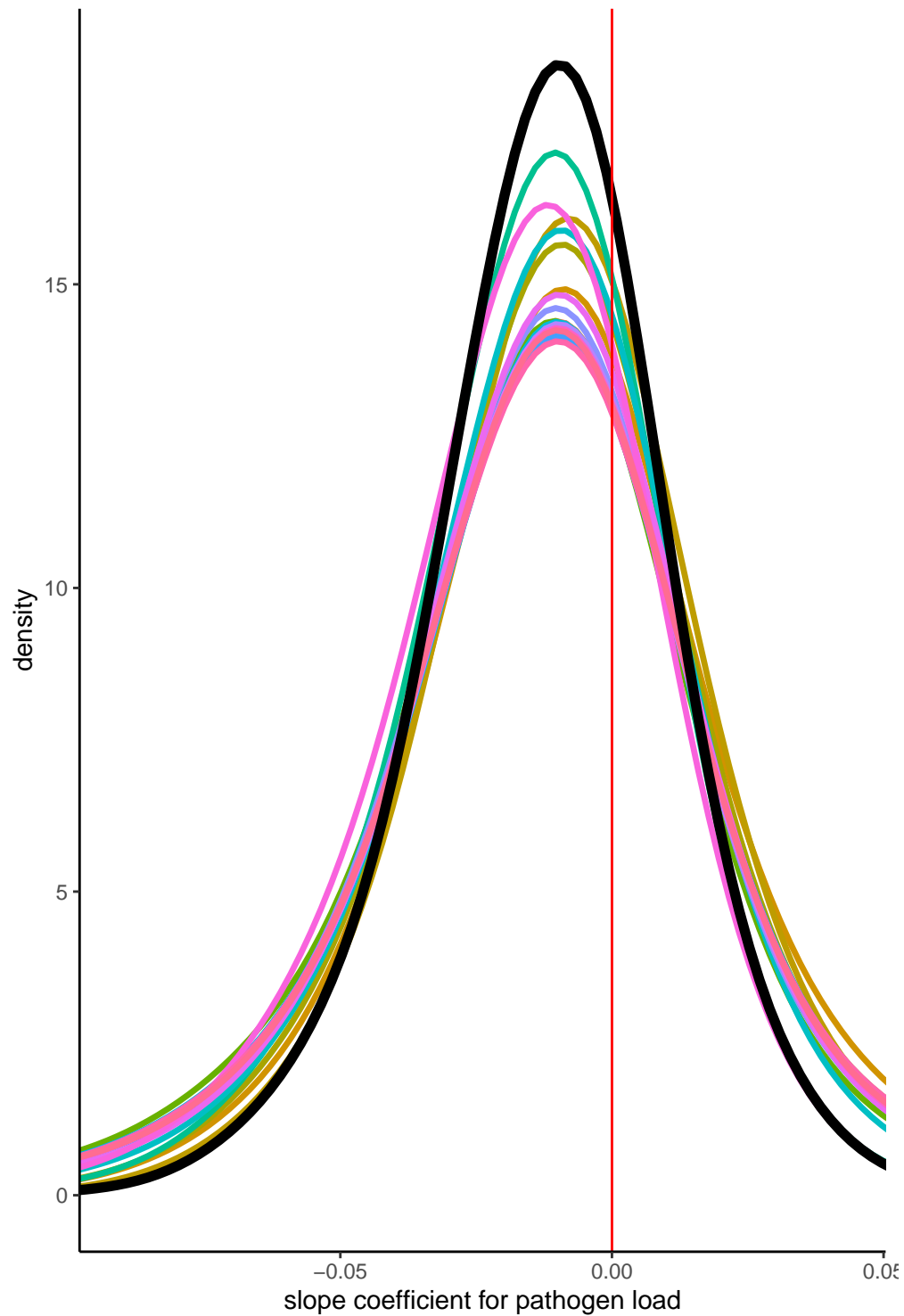
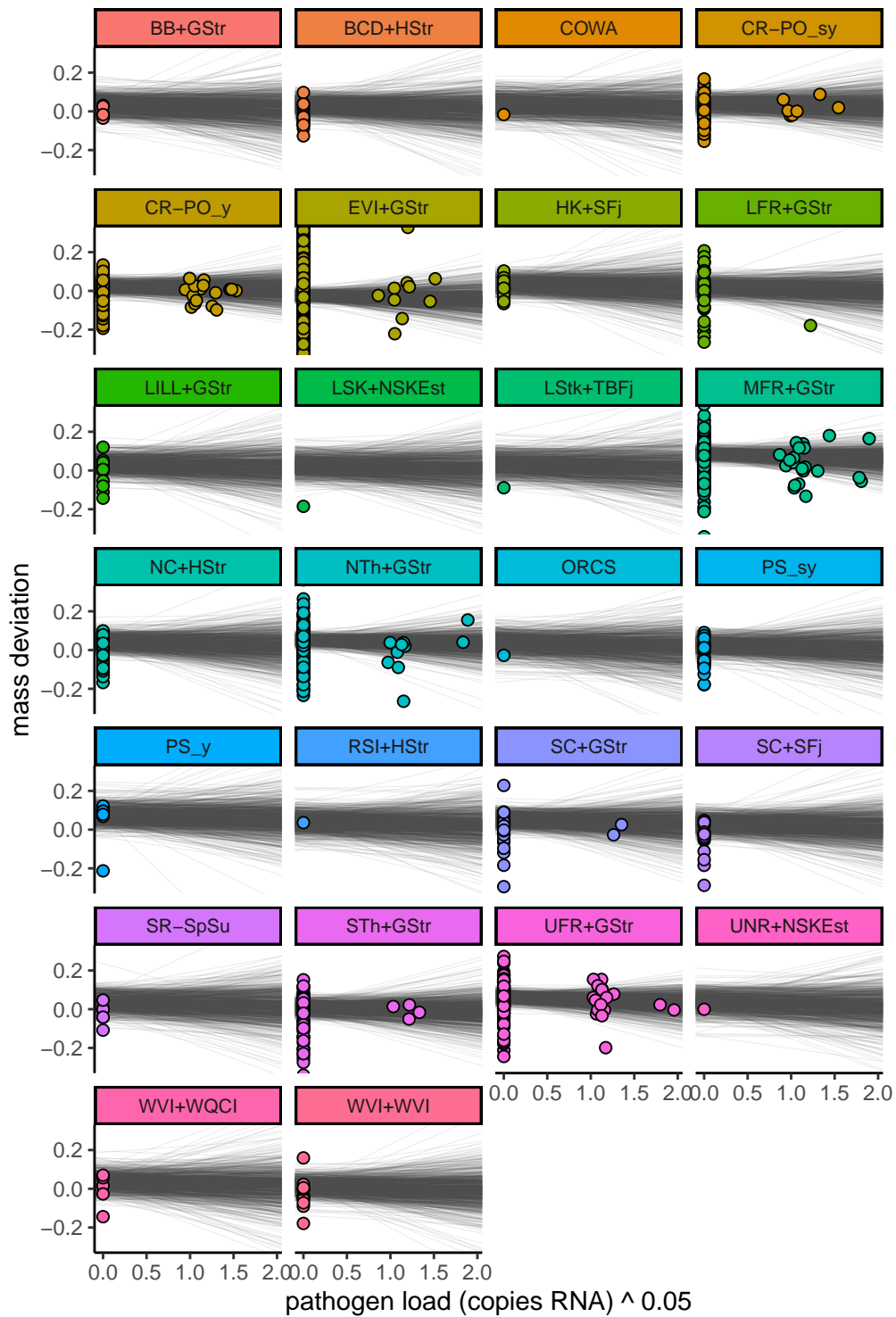
Piscine Orthoreovirus FaWi



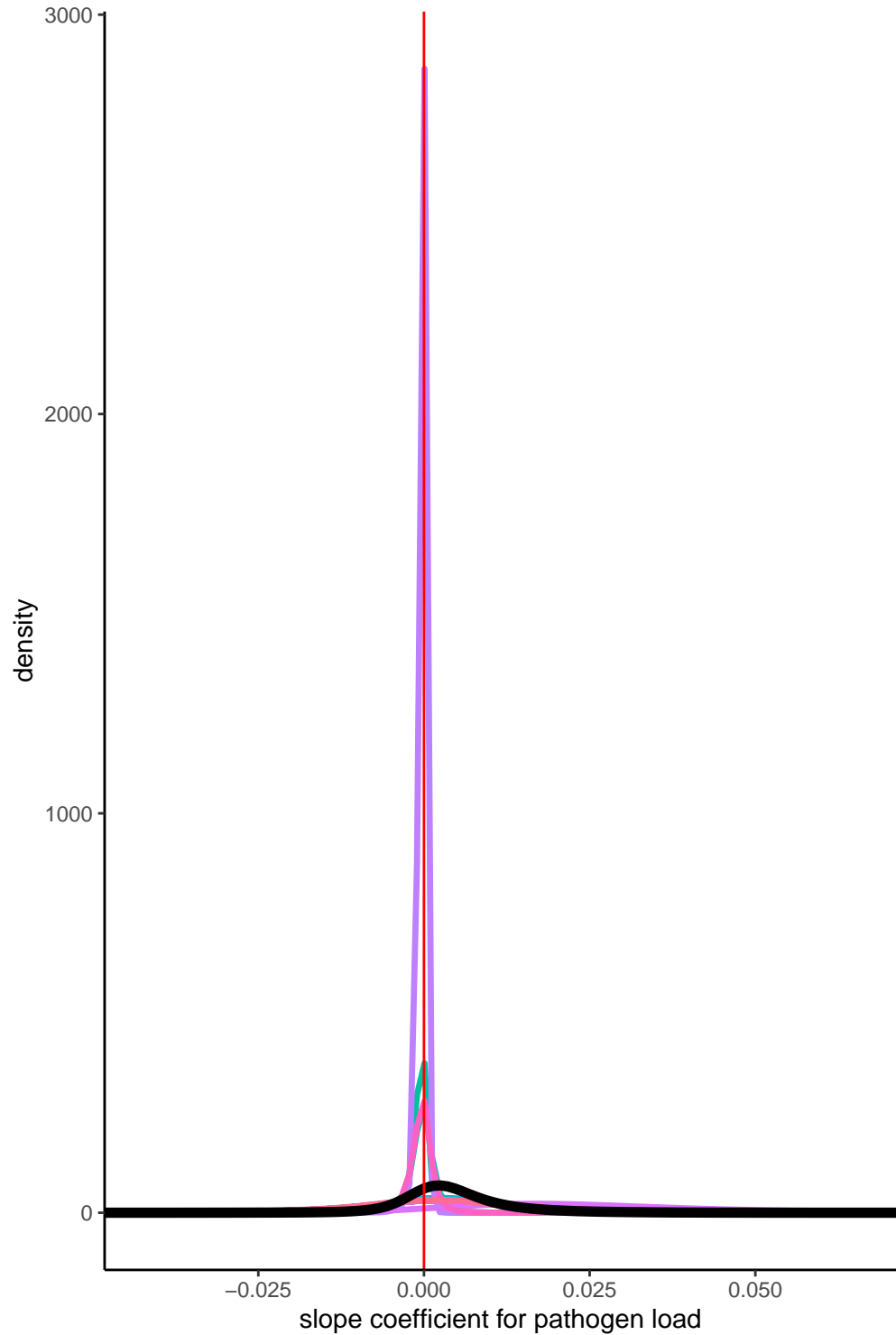
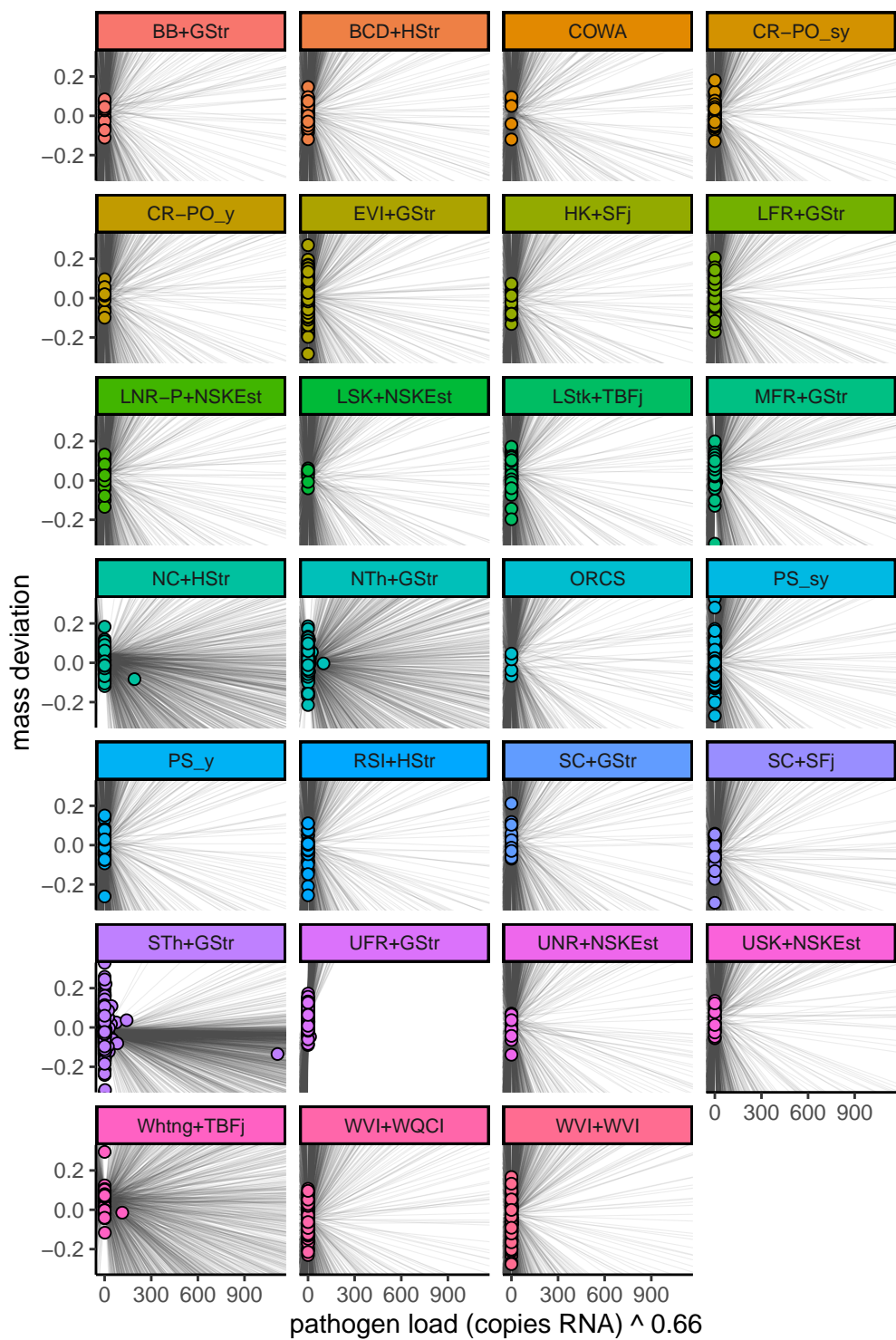
Renibacterium salmoninarum SpSu



Rickettsia-like Organism SpSu

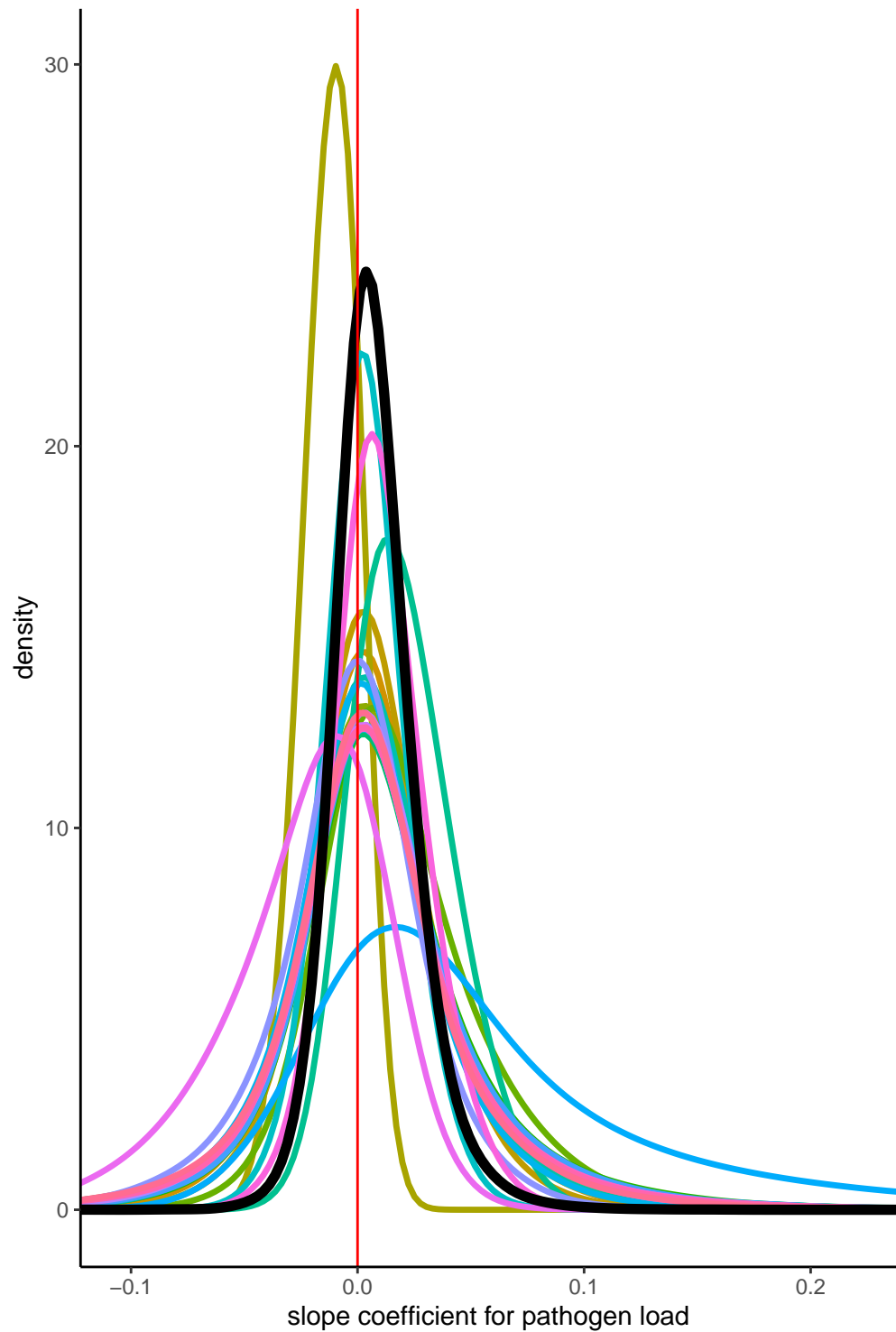
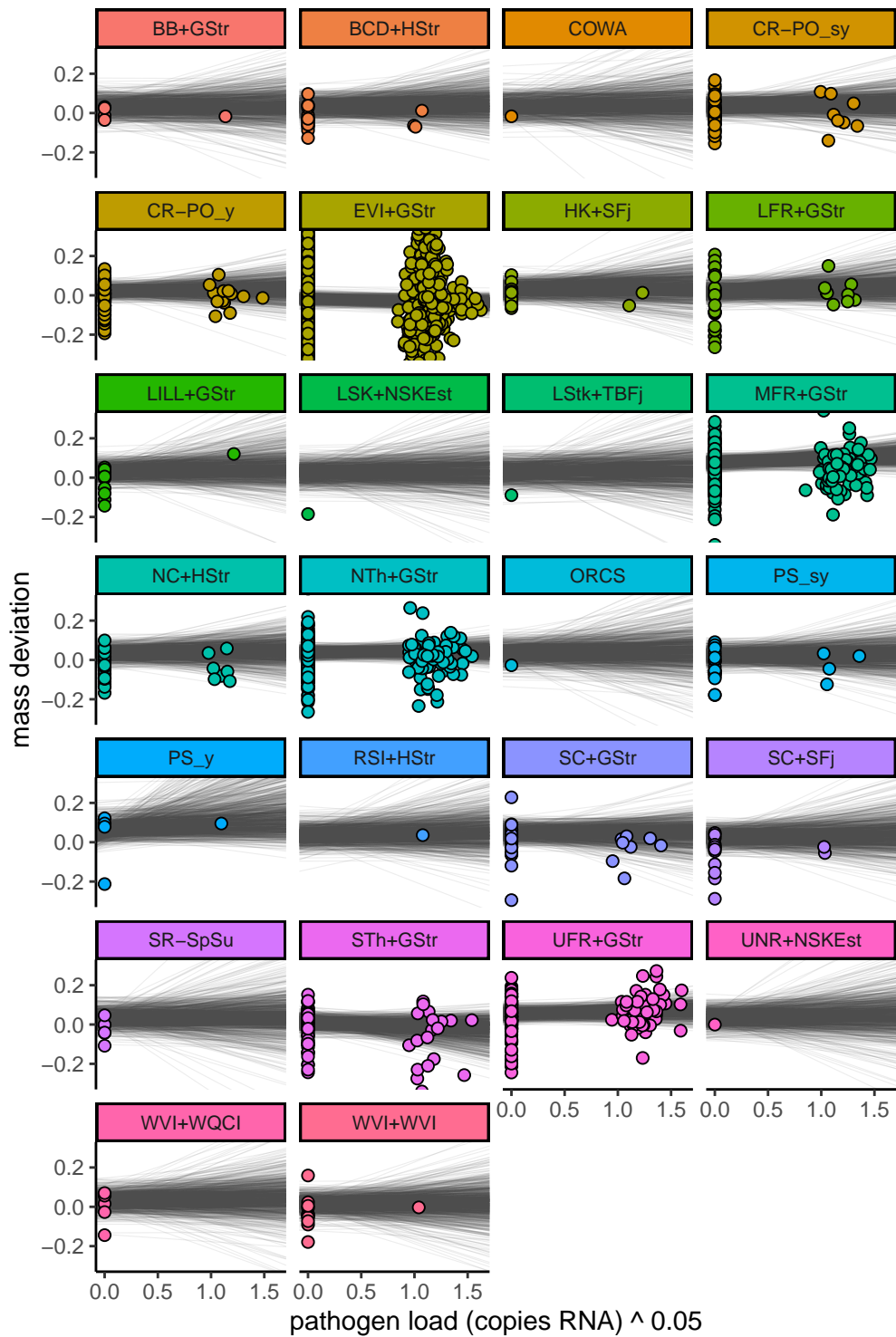


Rickettsia-like Organism FaWi

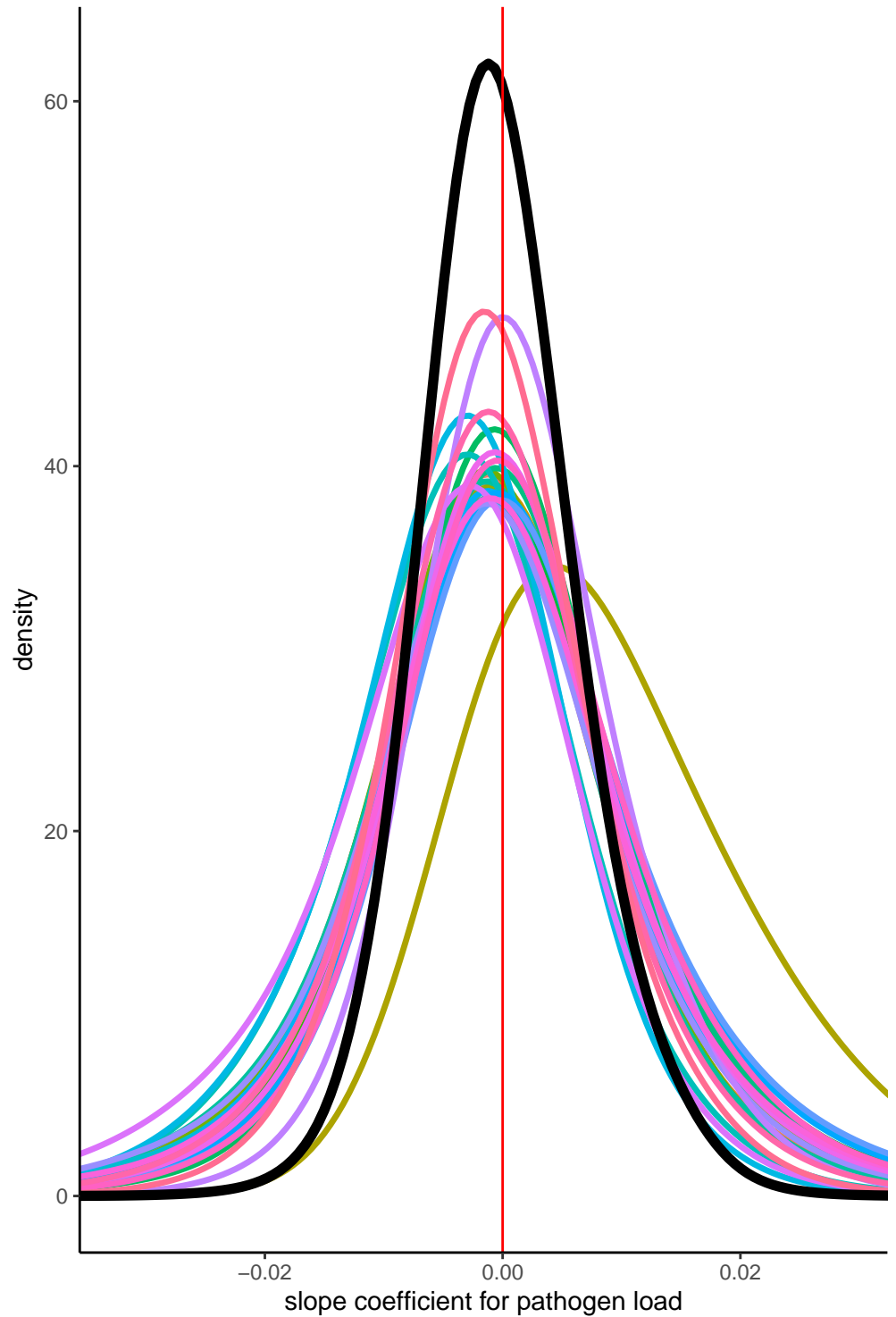
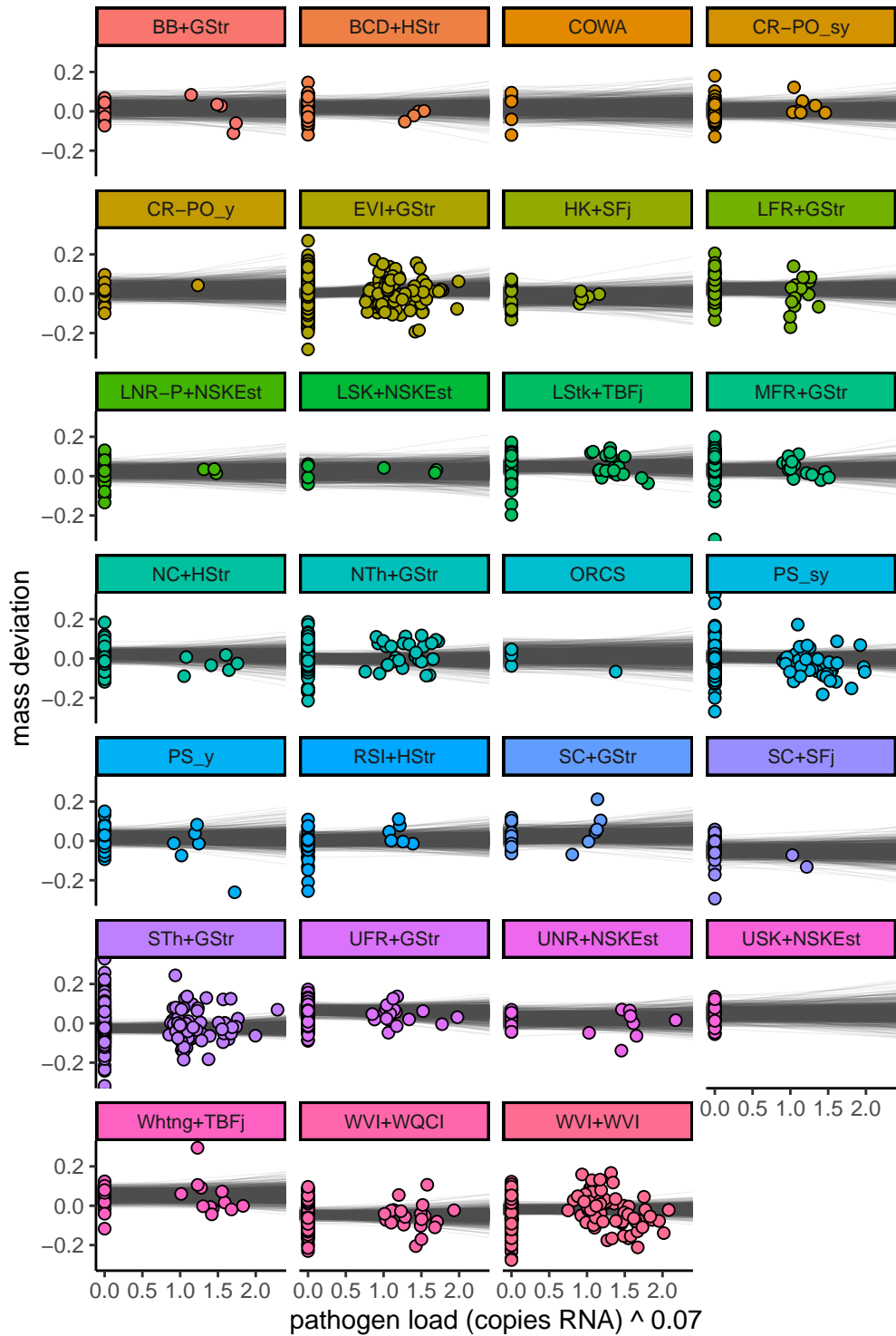




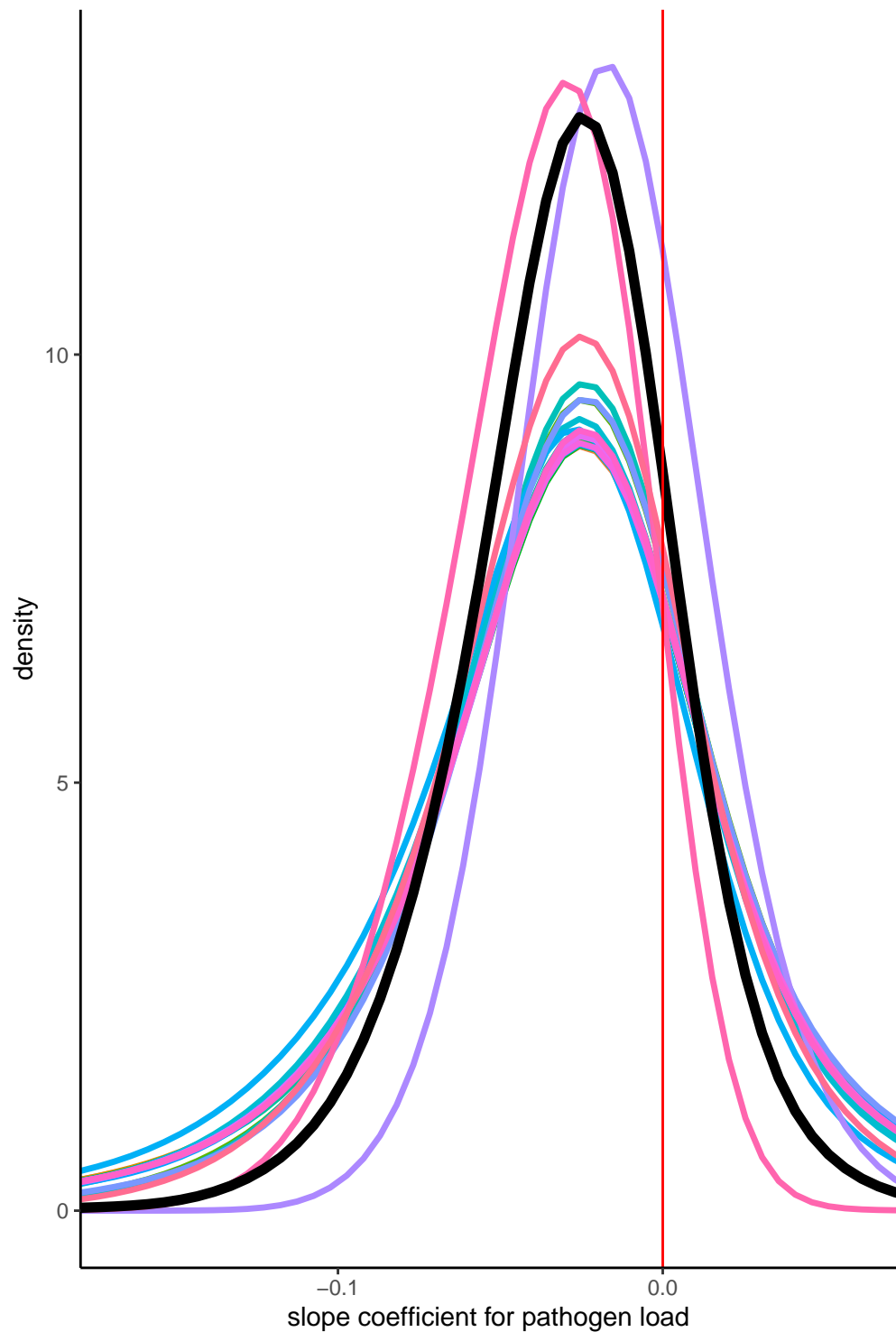
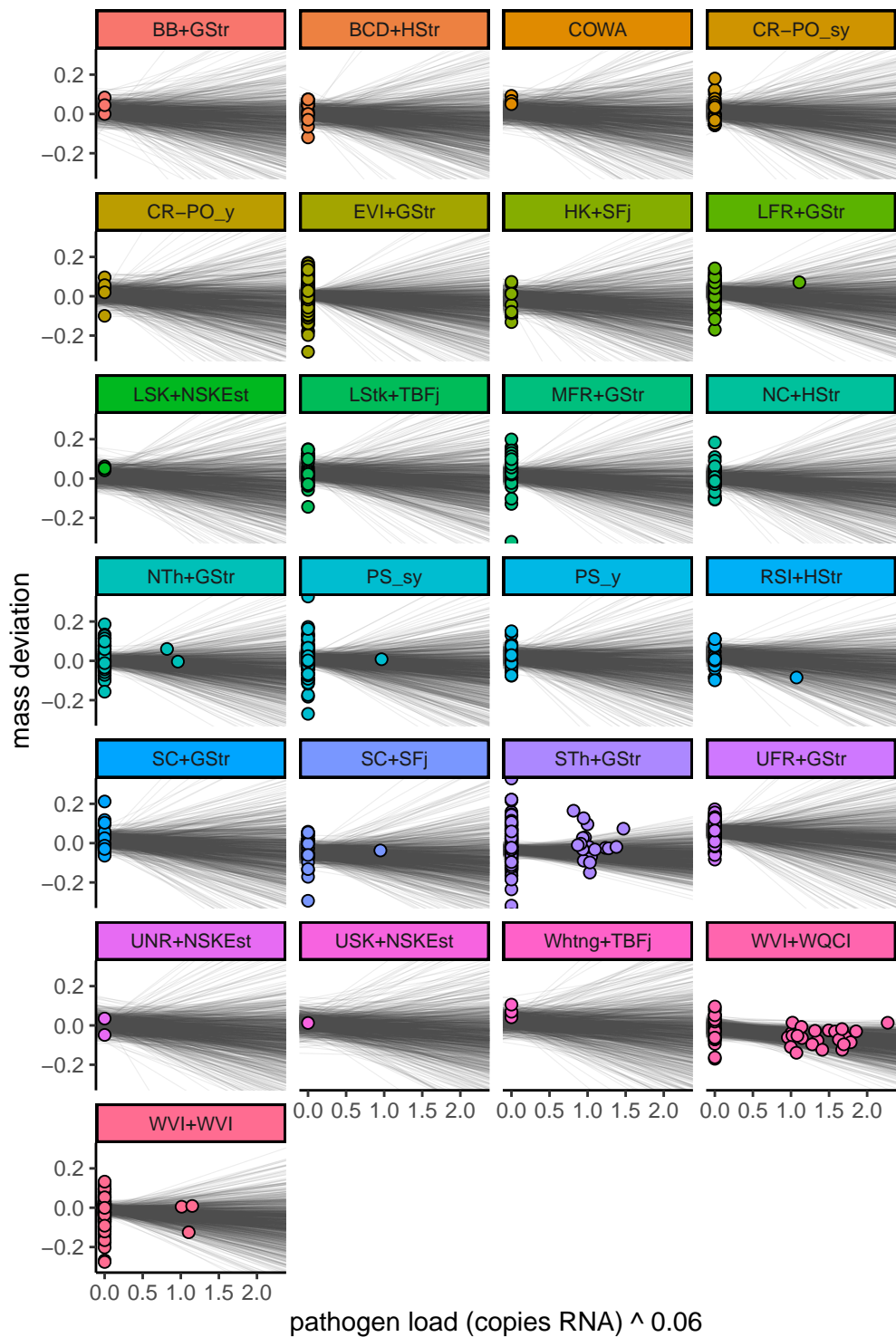
Candidatus *Syngnamydia salmonis* SpSu



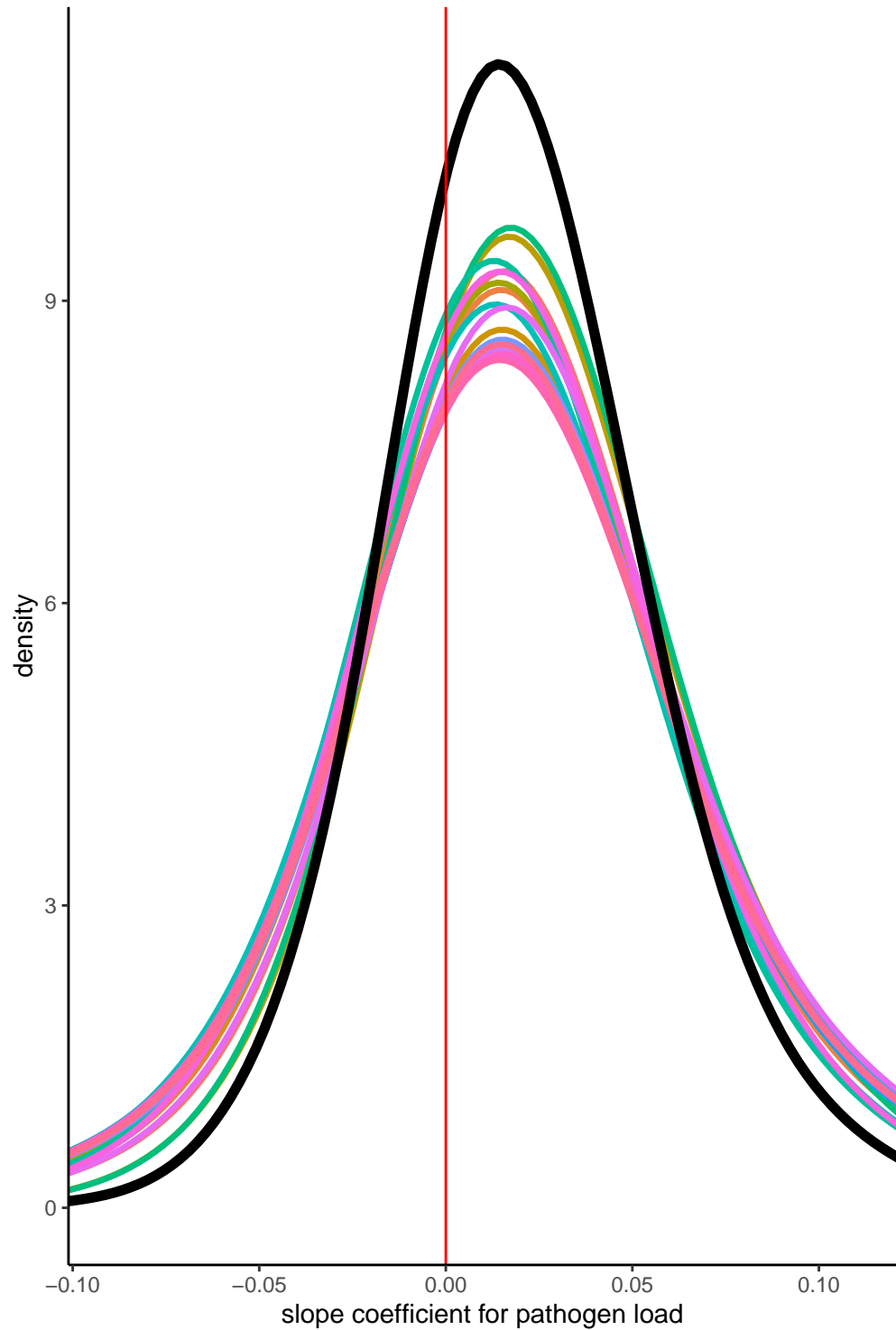
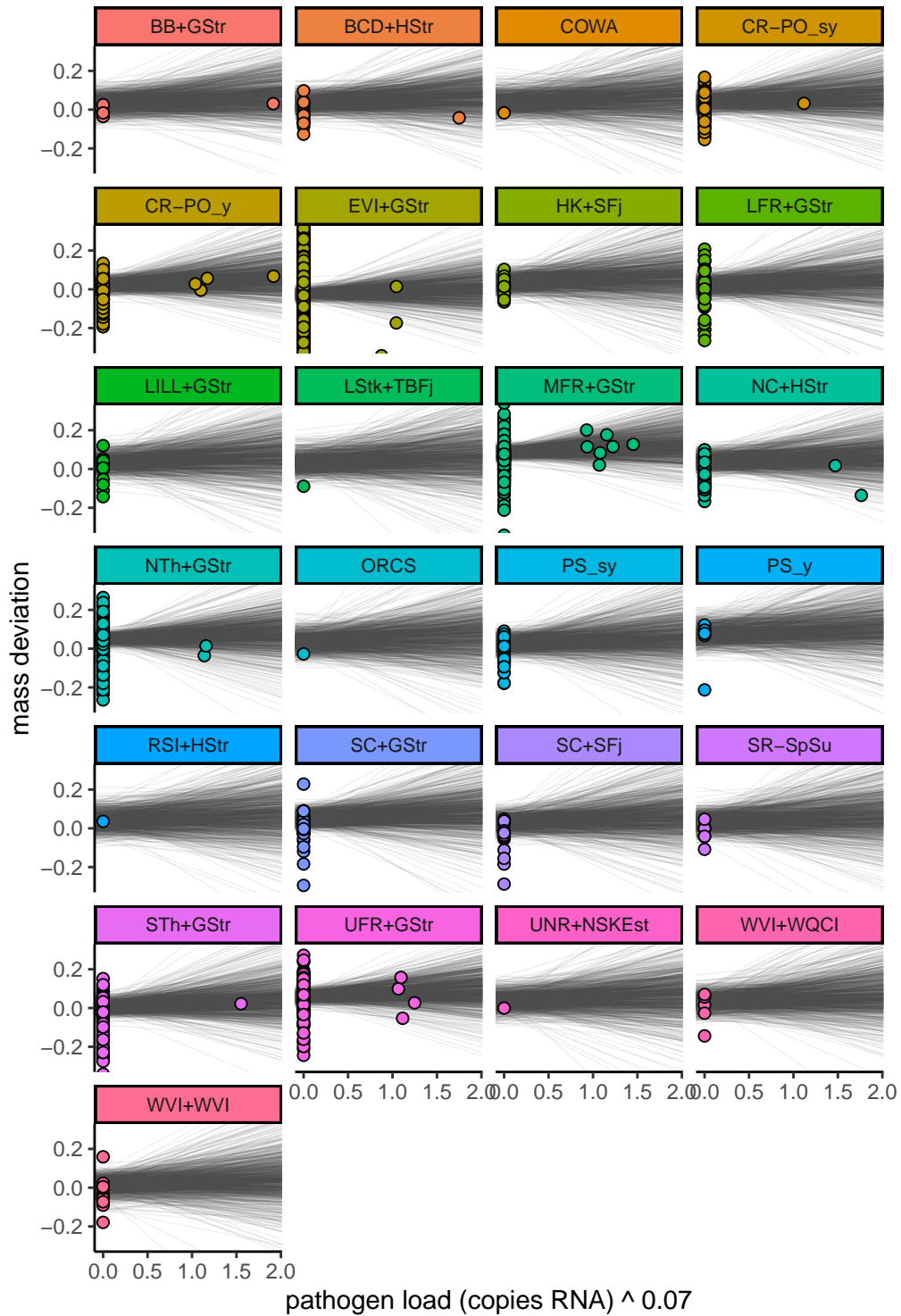
Candidatus *Syngnamydia salmonis* FaWi



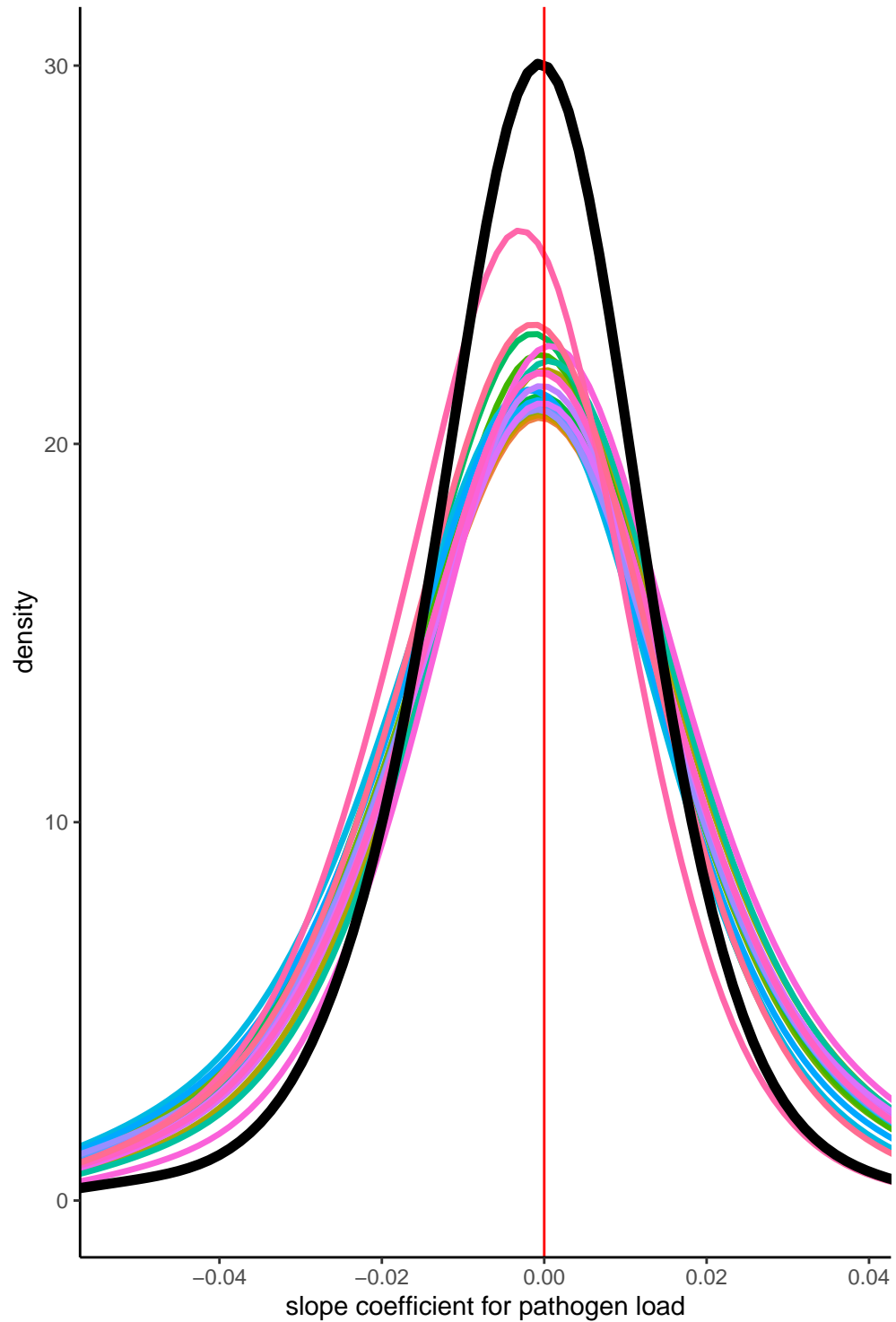
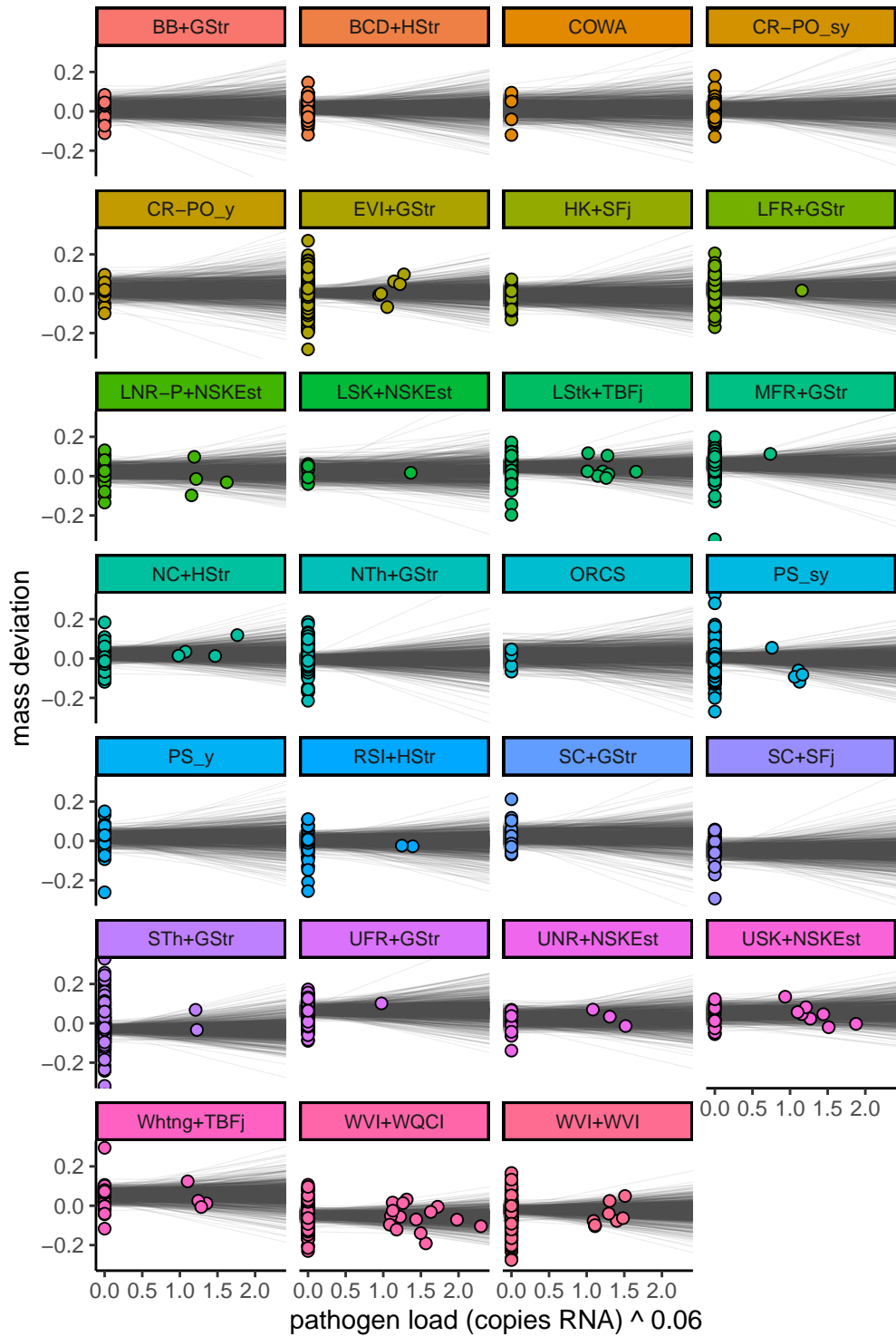
Putative RNA Virus 1 FaWi



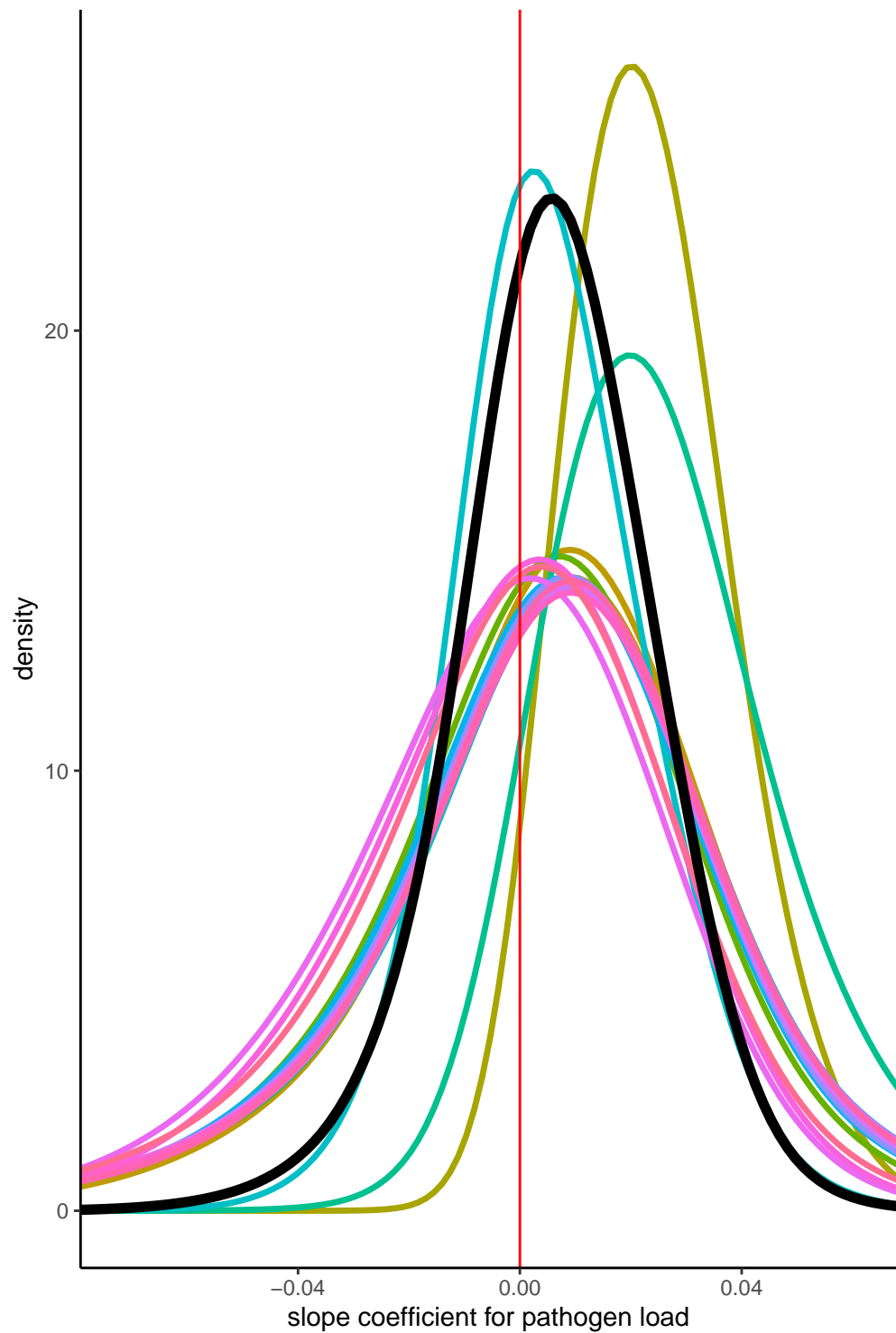
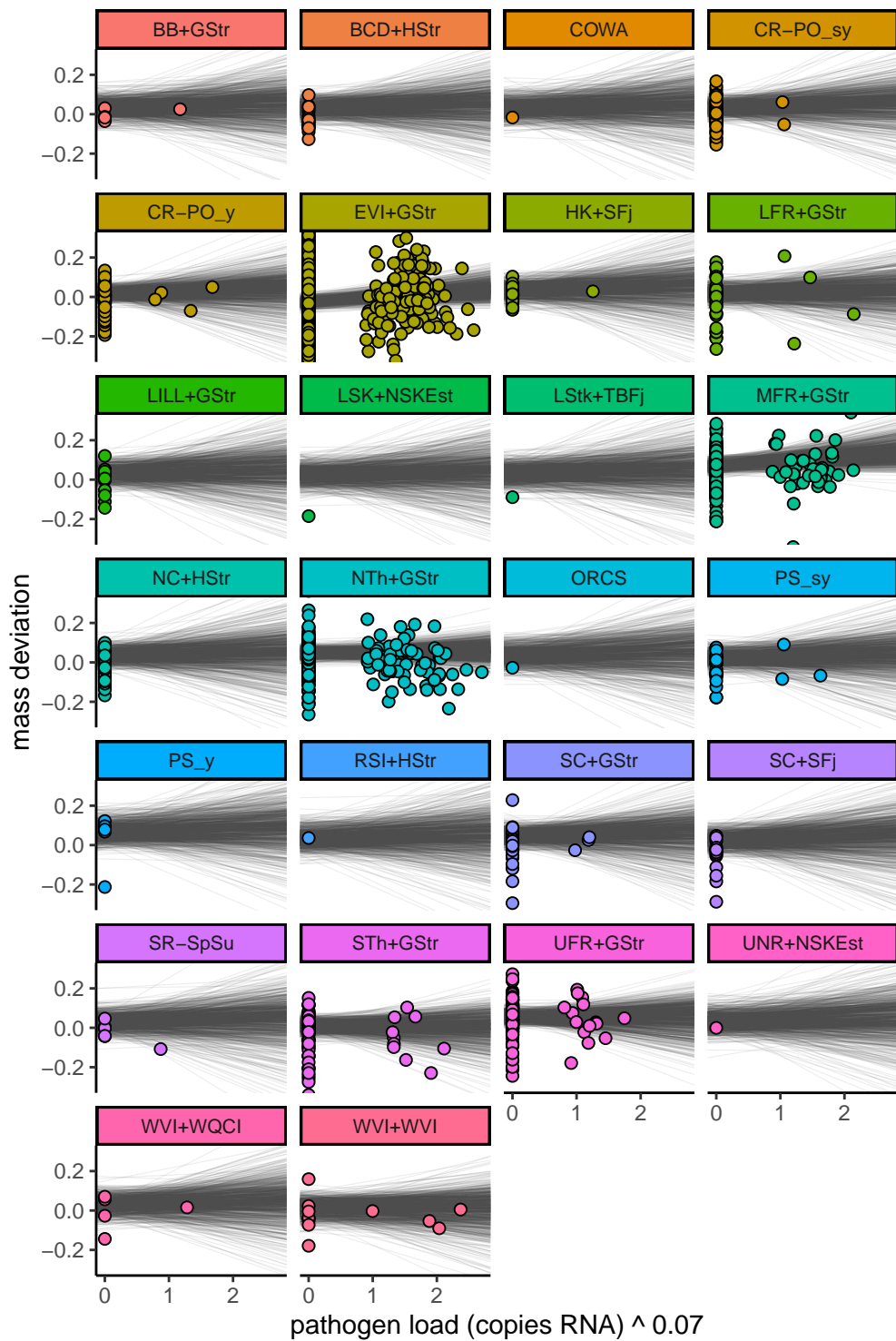
Sphaerothecum destruens SpSu



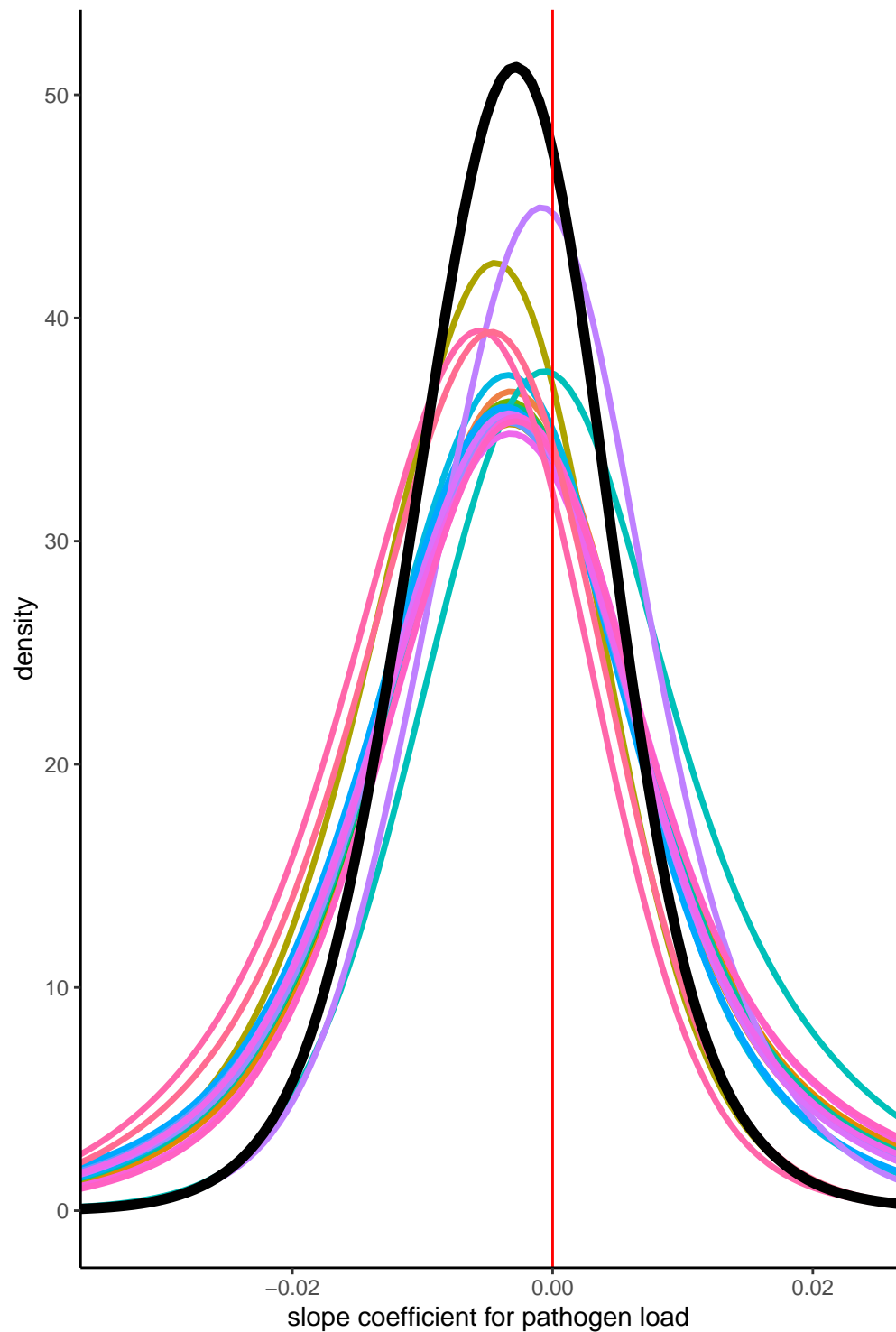
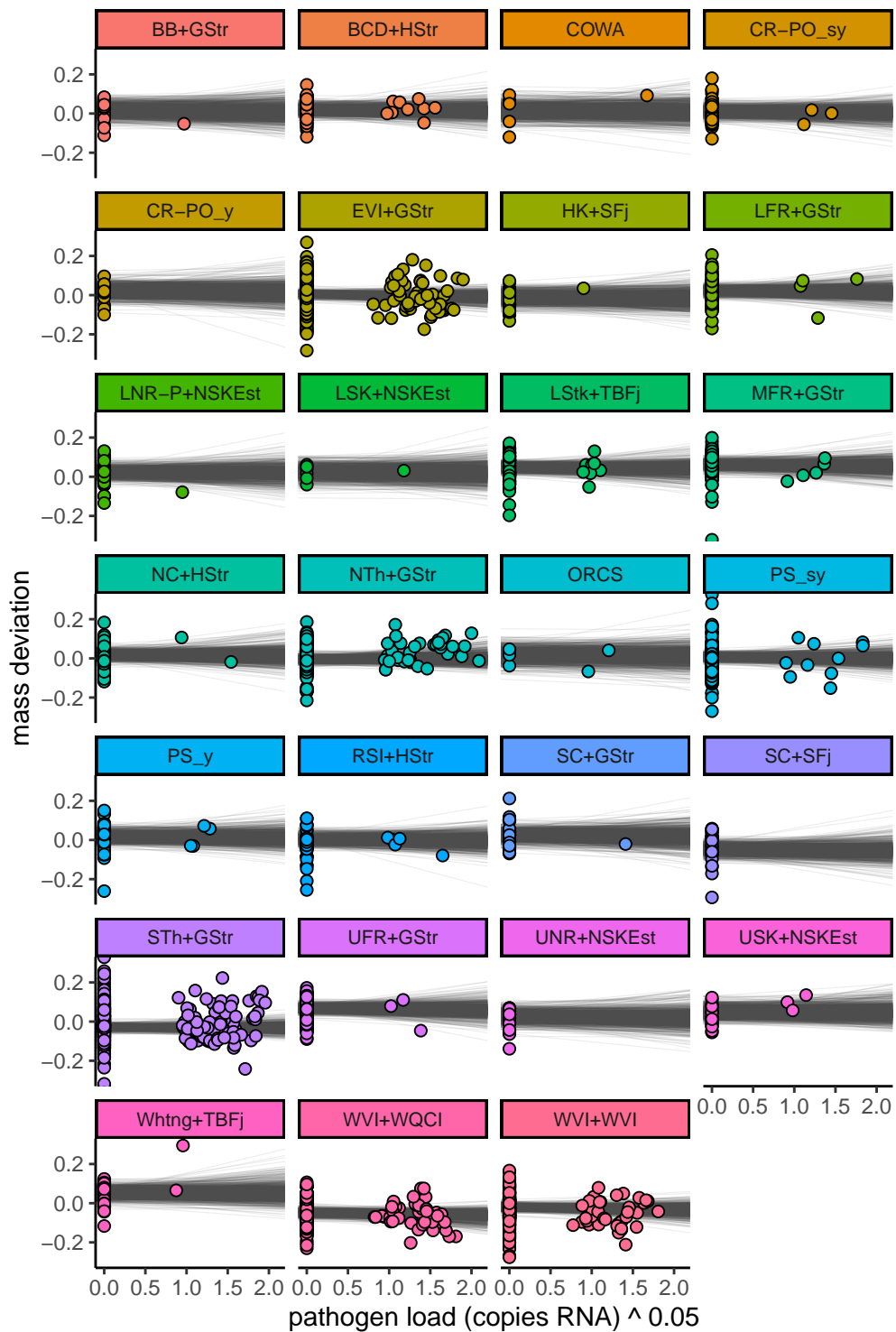
Sphaerothecum destruens FaWi



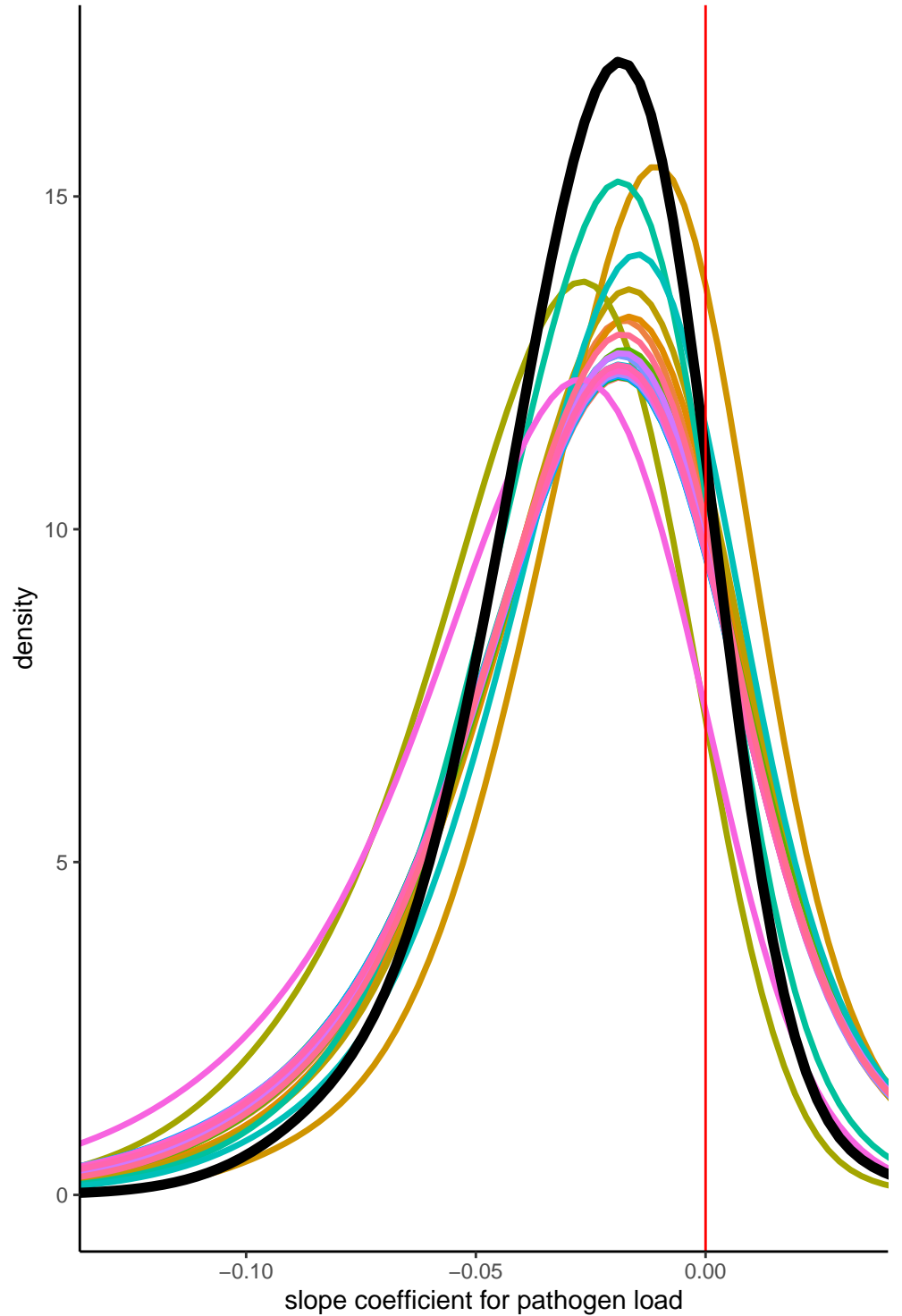
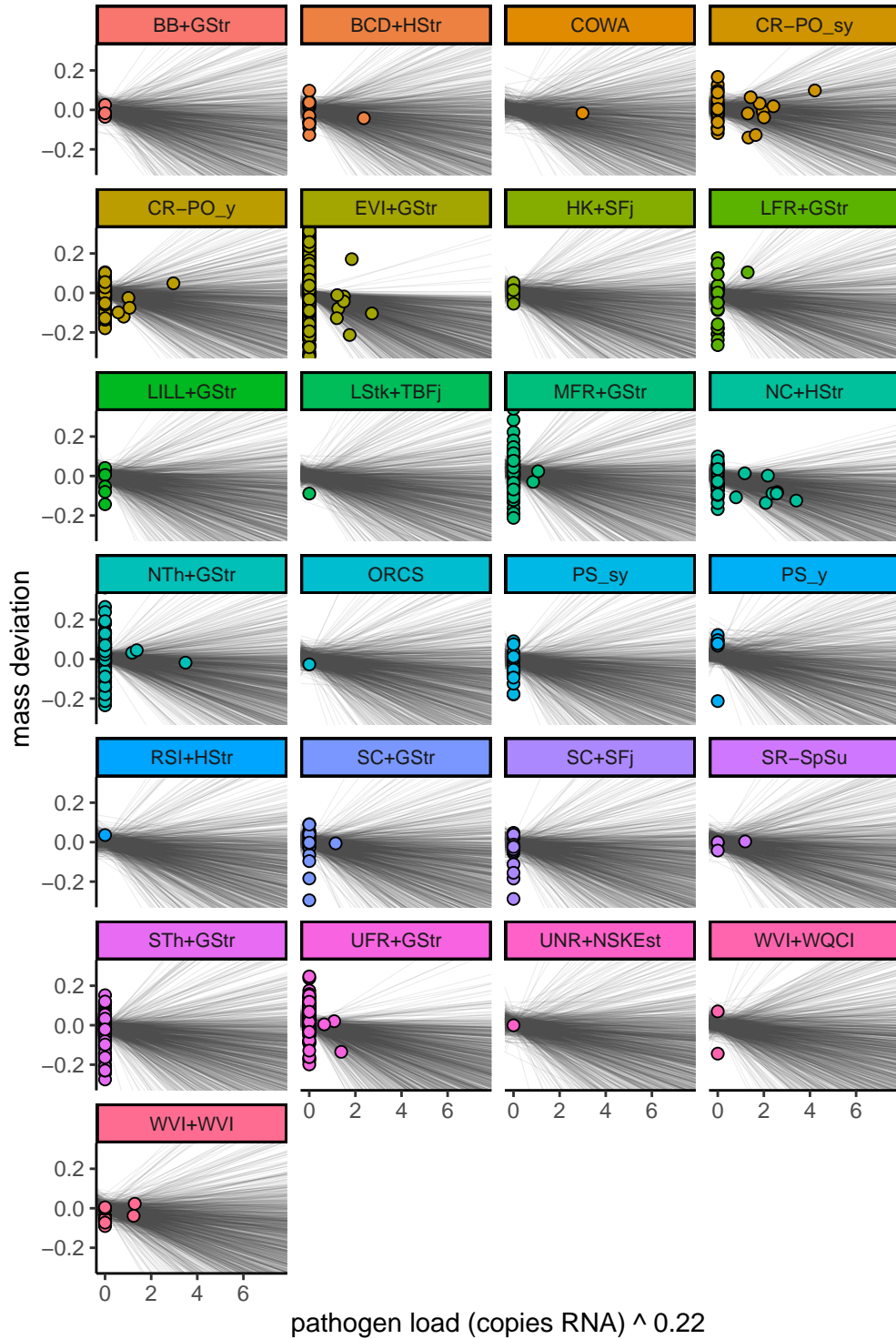
Tetracapsuloides bryosalmonae SpSu



Tetracapsuloides bryosalmonae FaWi

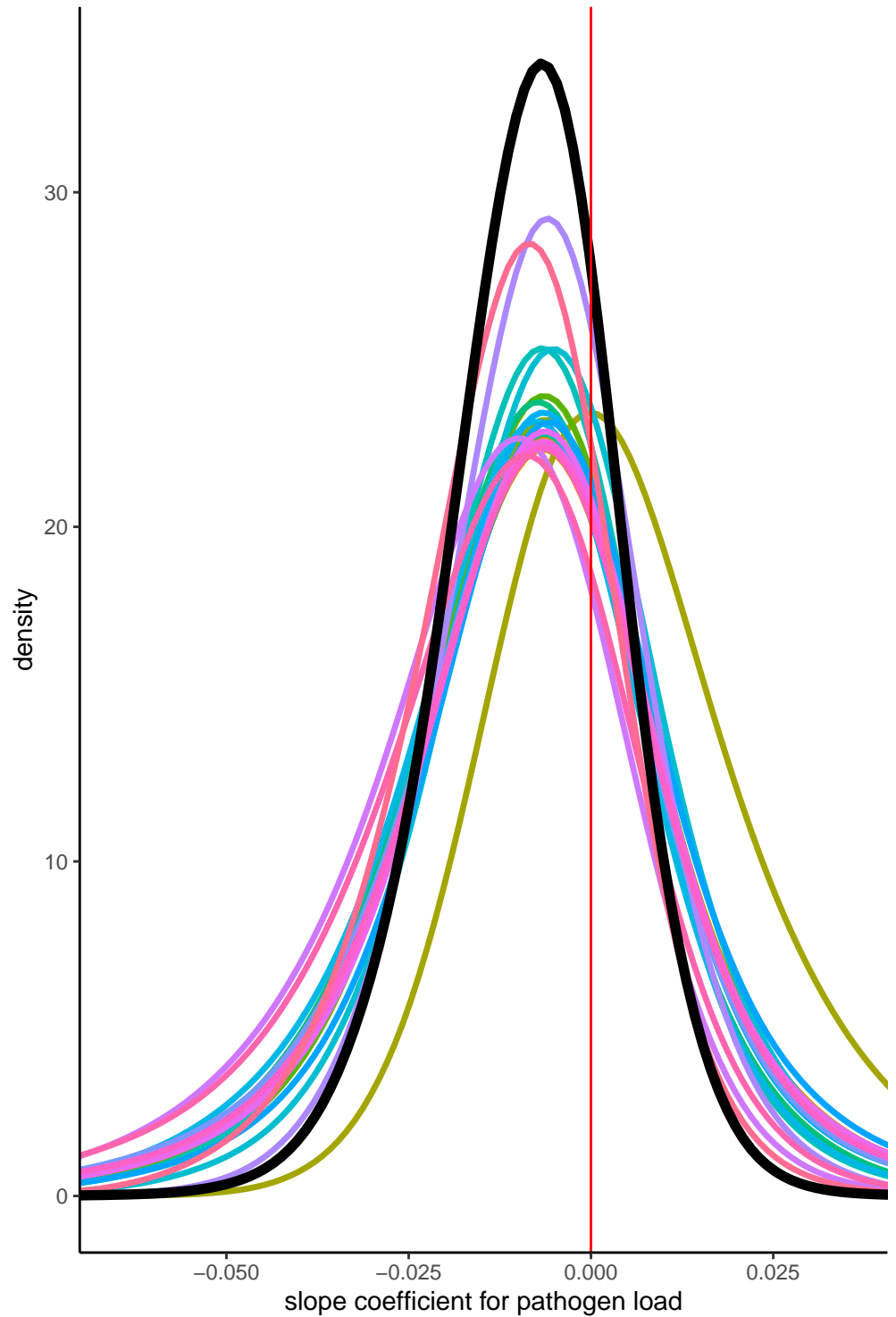
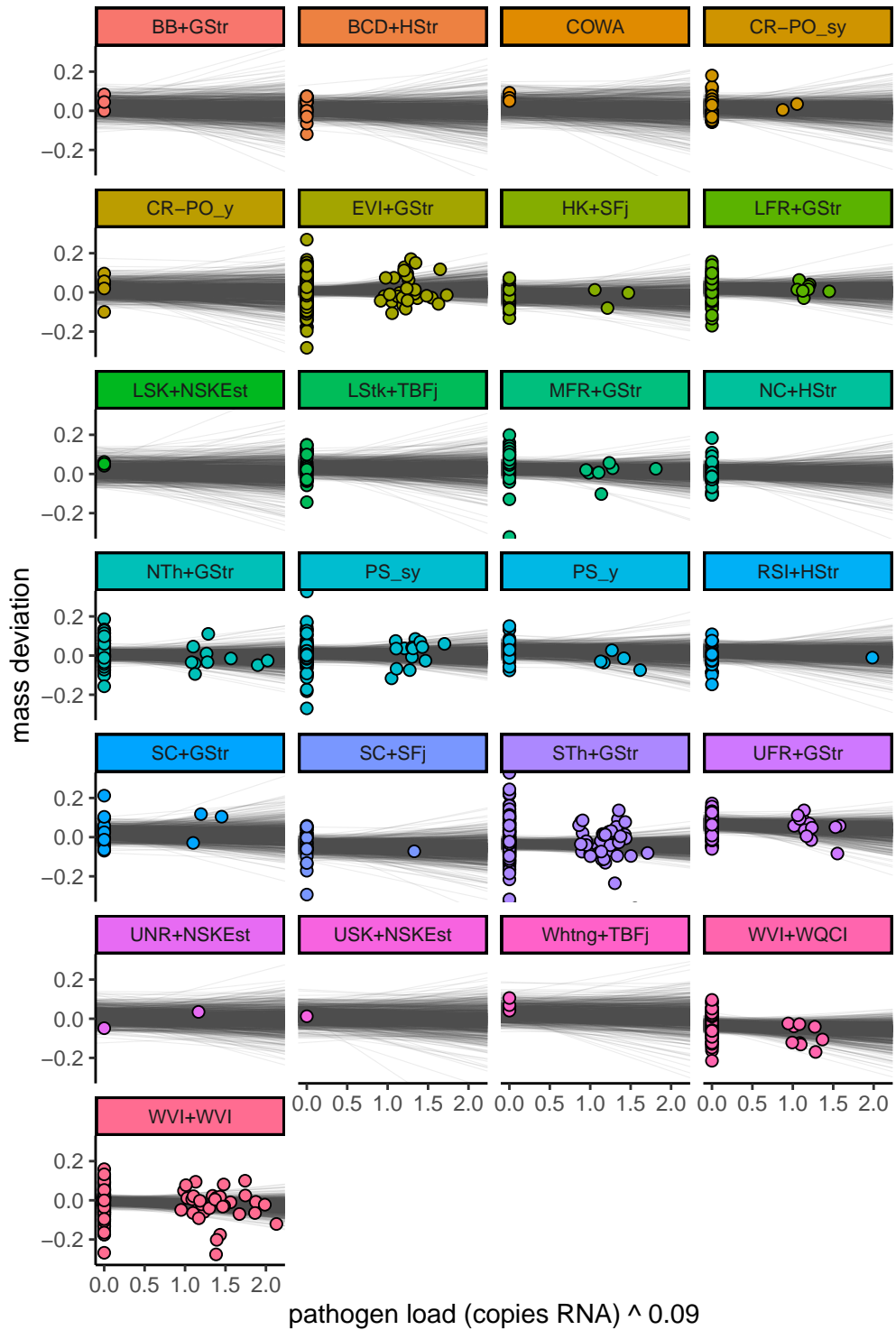


Tenacibaculum maritimum SpSu

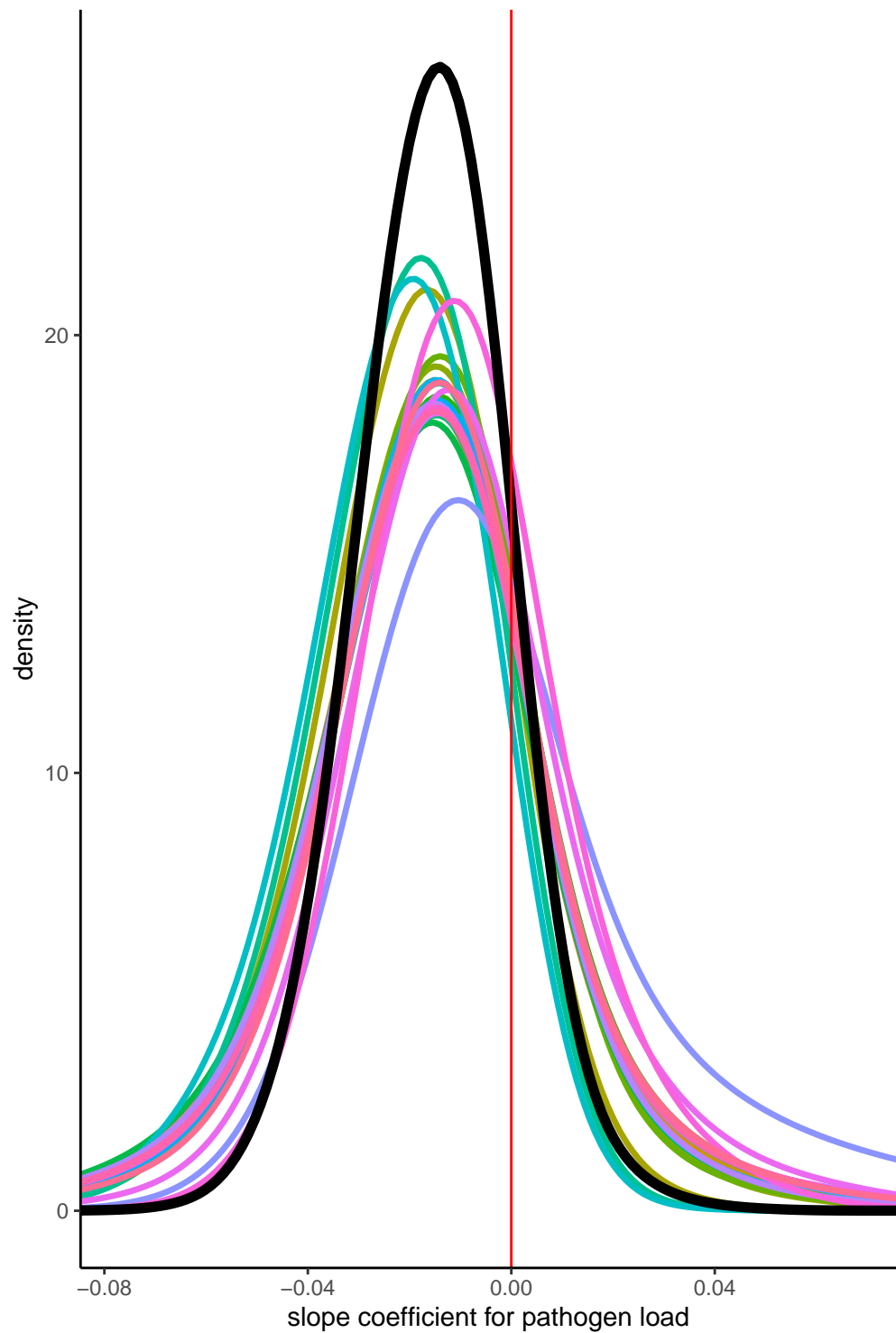
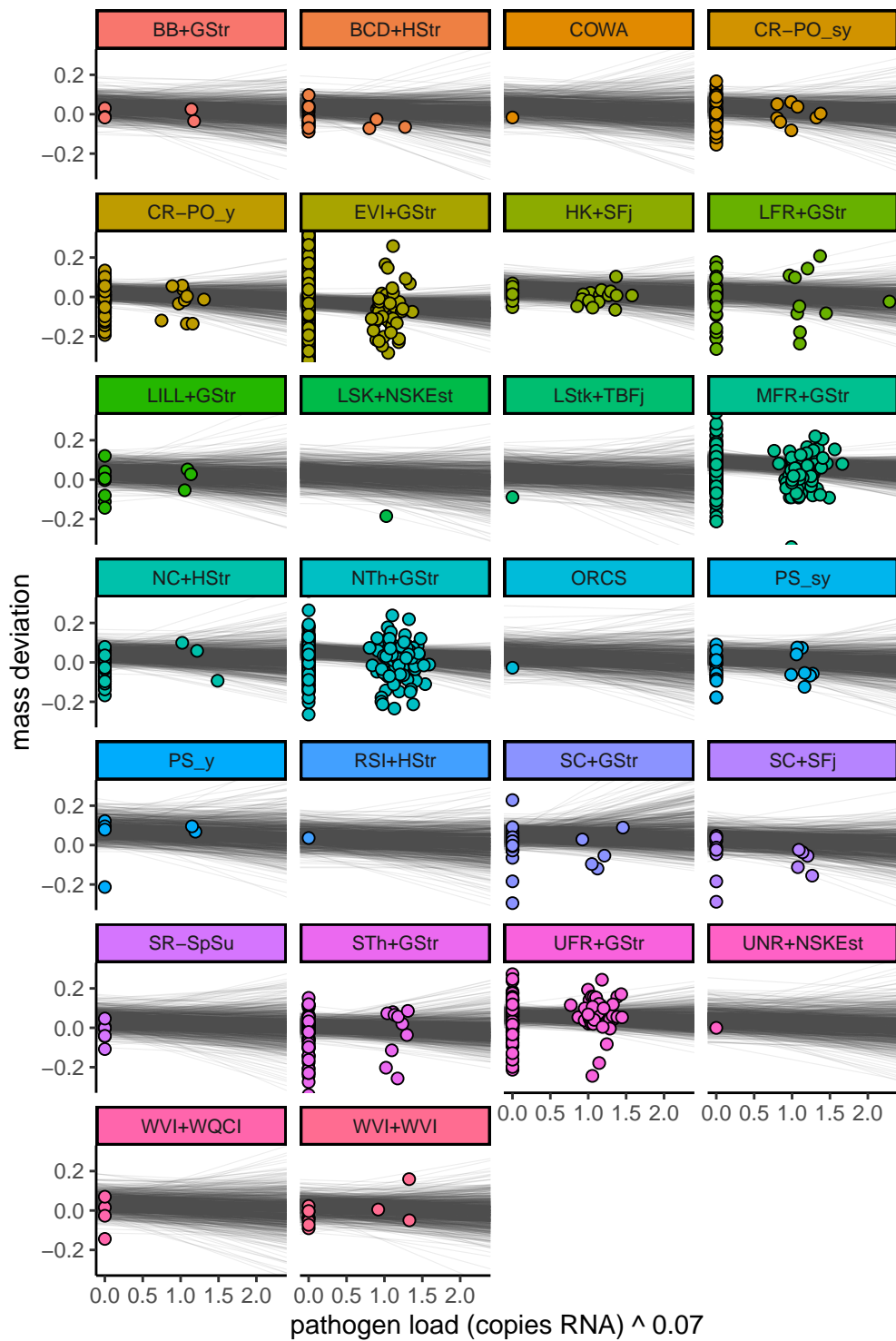




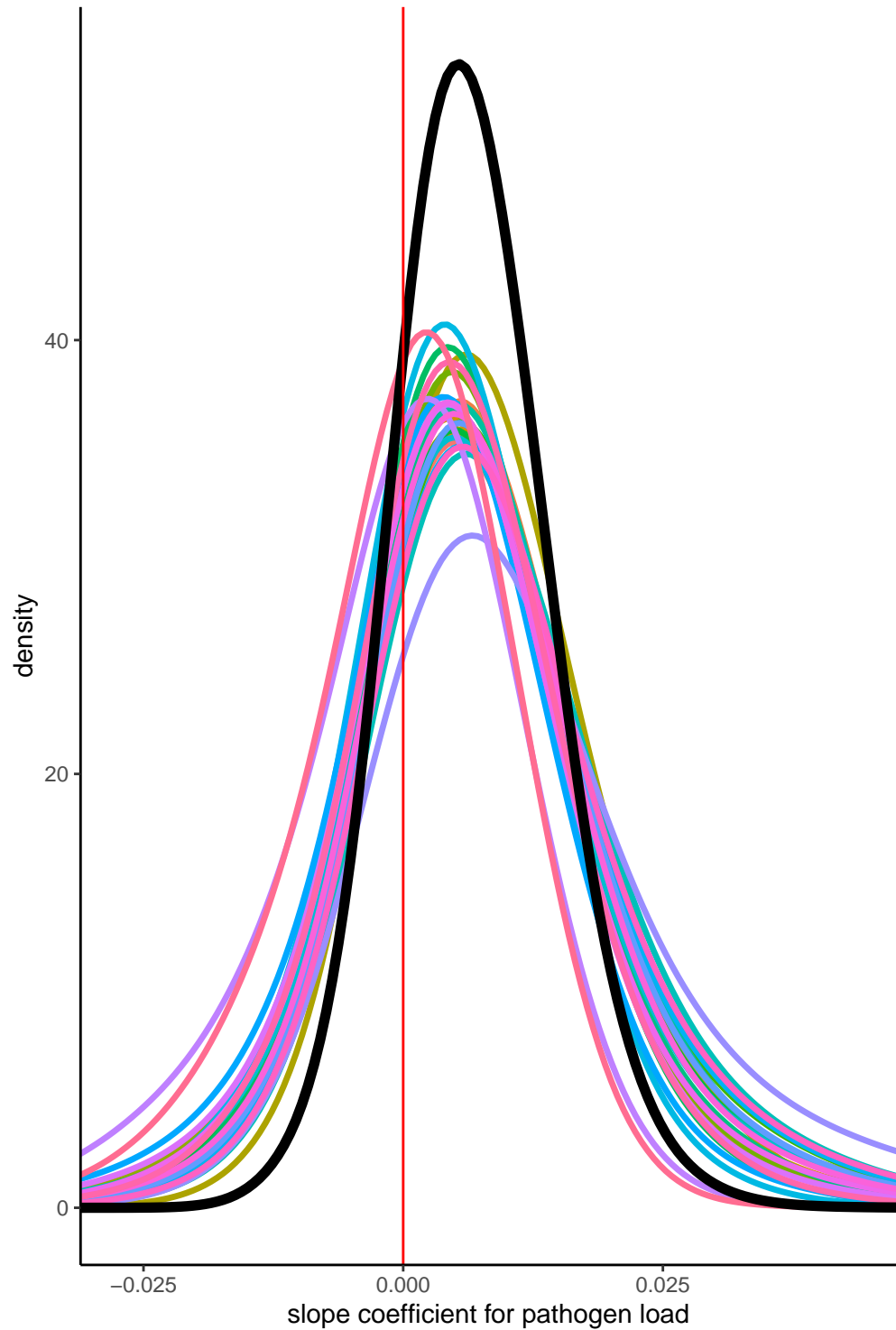
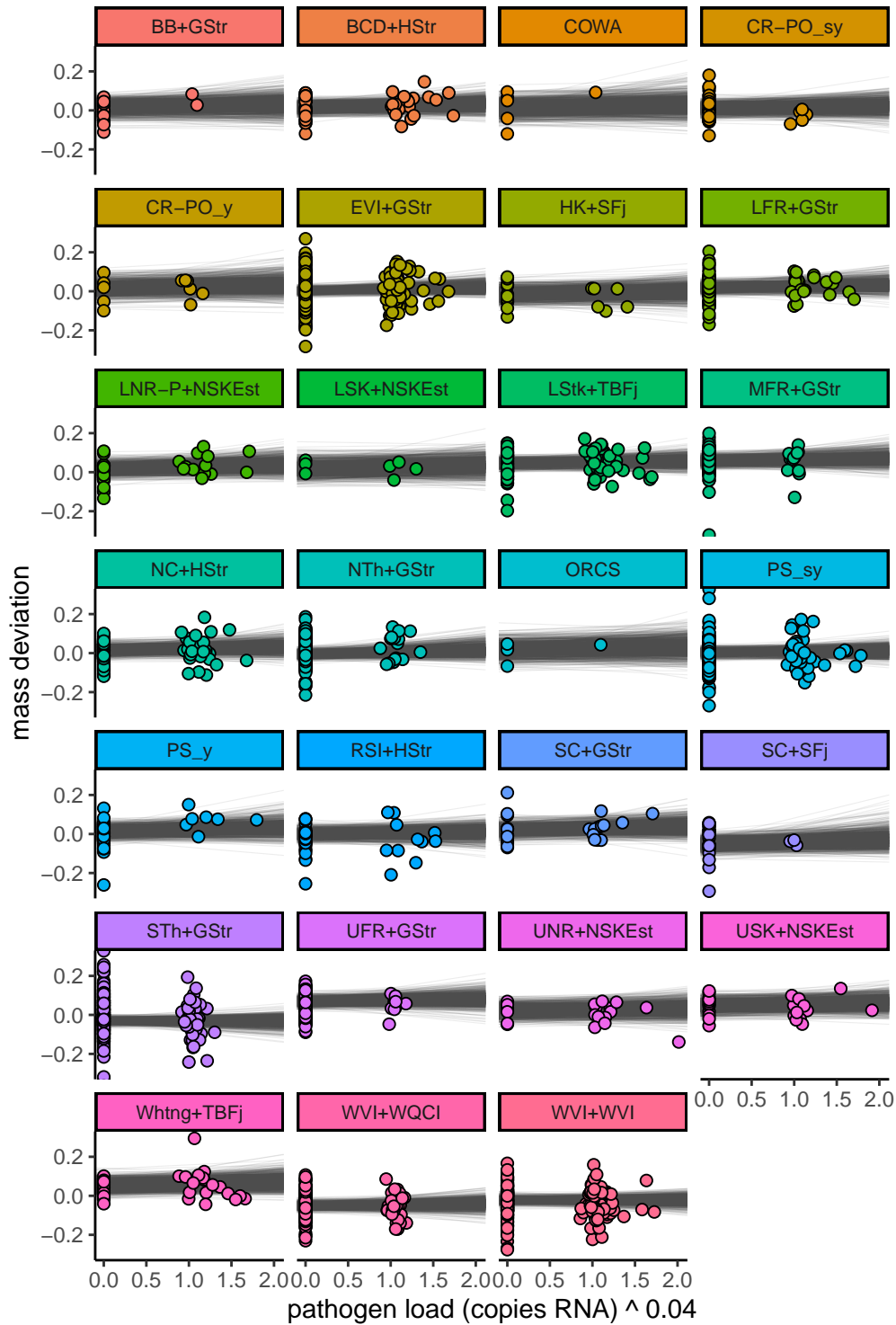
Tenacibaculum maritimum FaWi



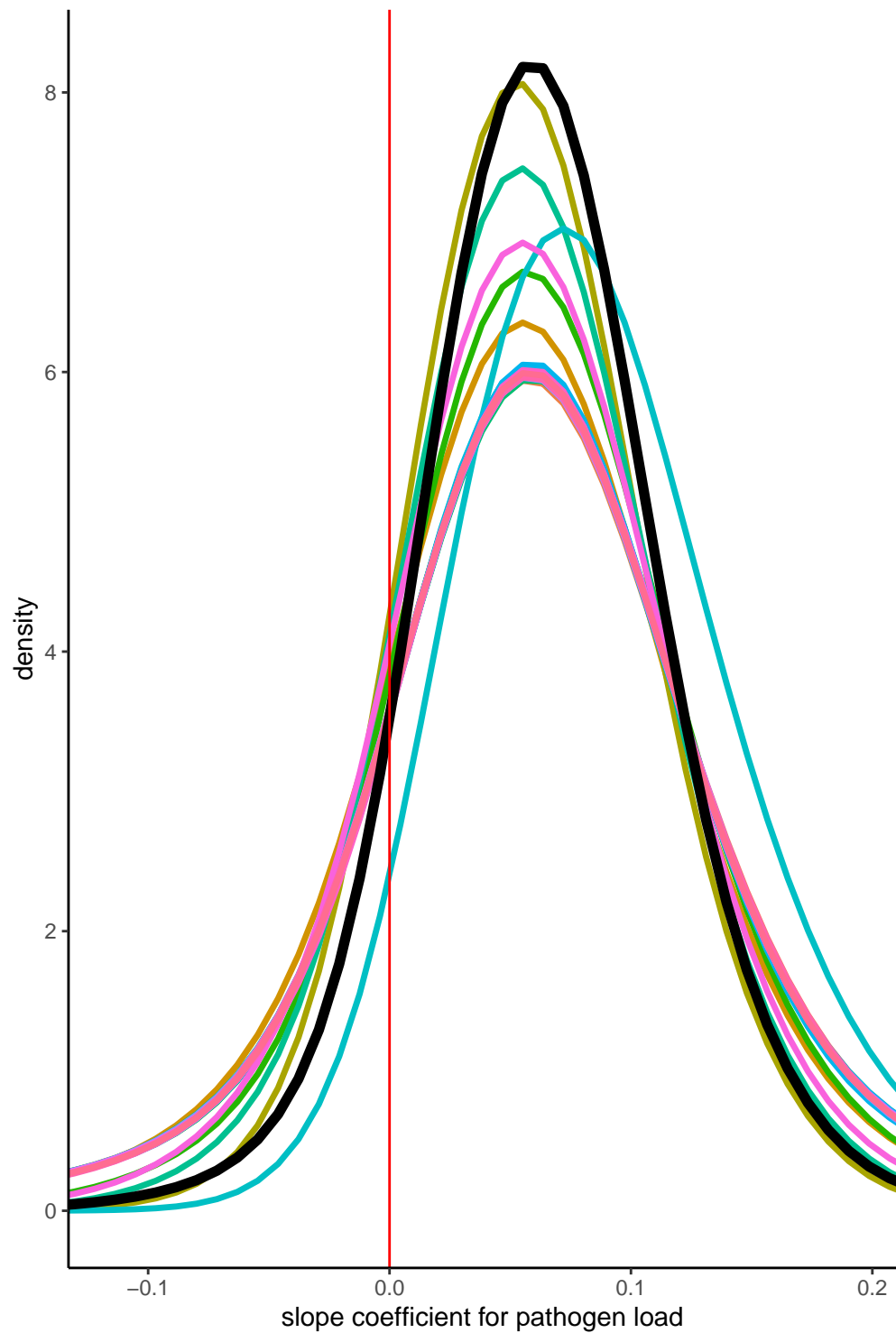
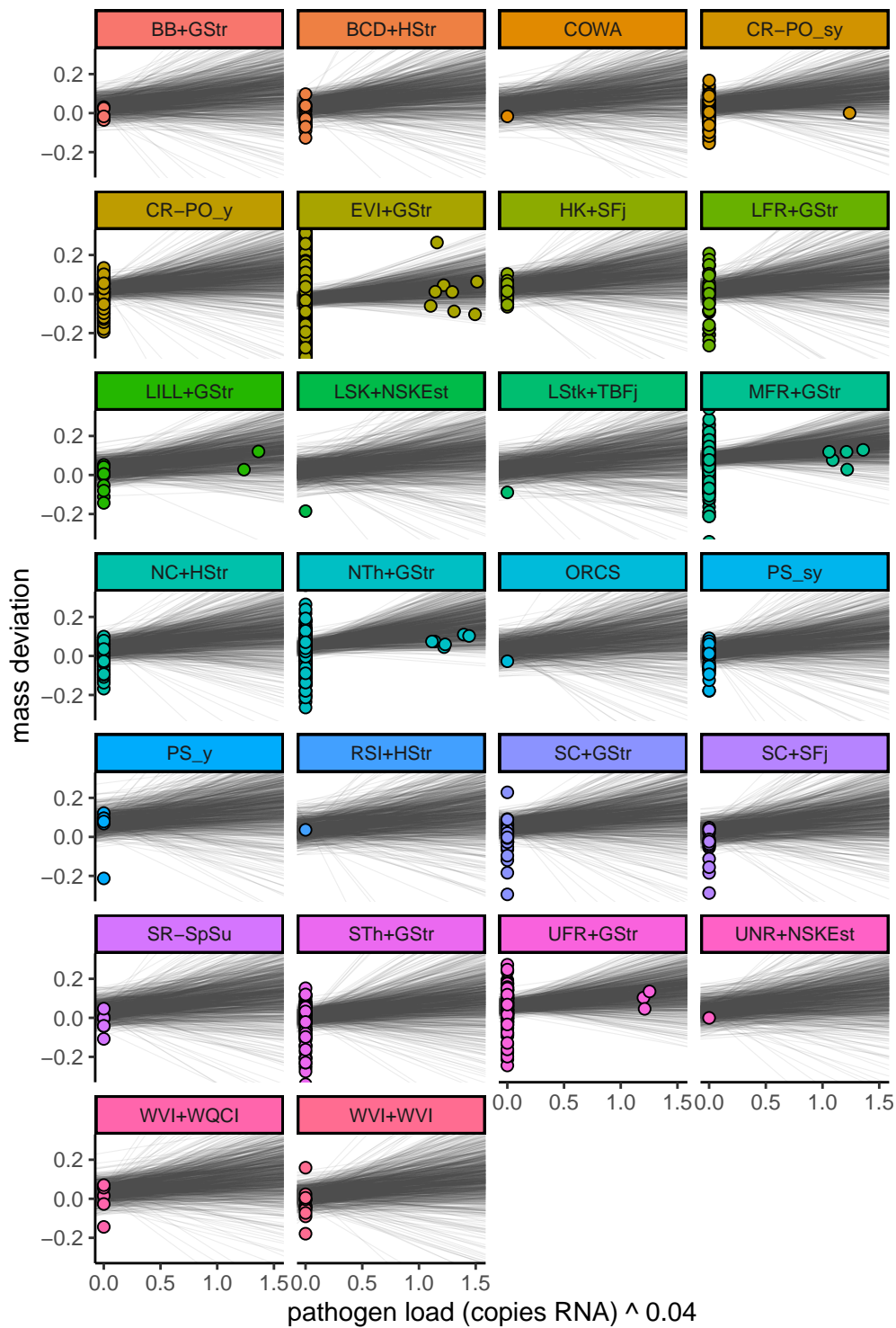
# Erythrocytic Necrosis Virus SpSu



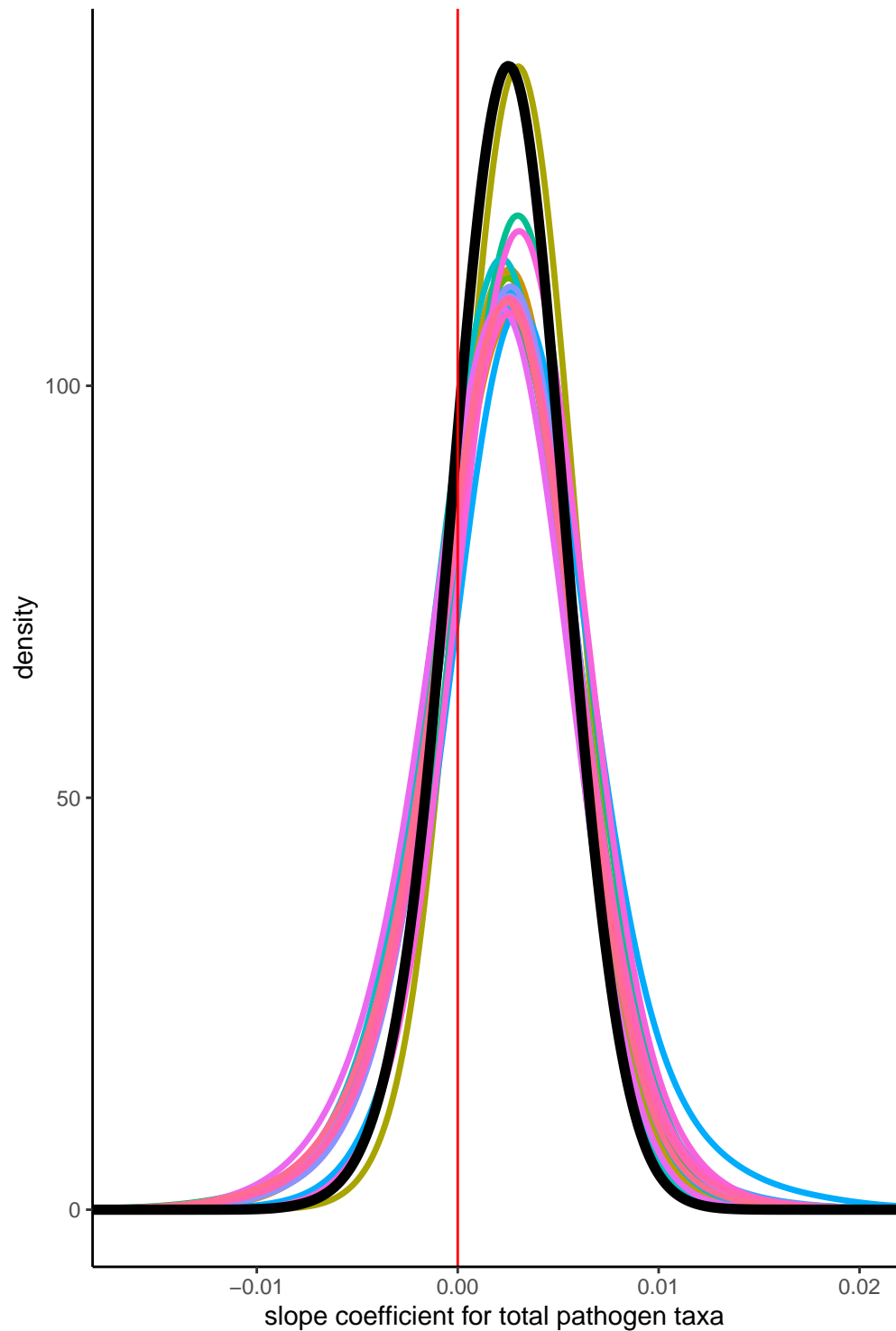
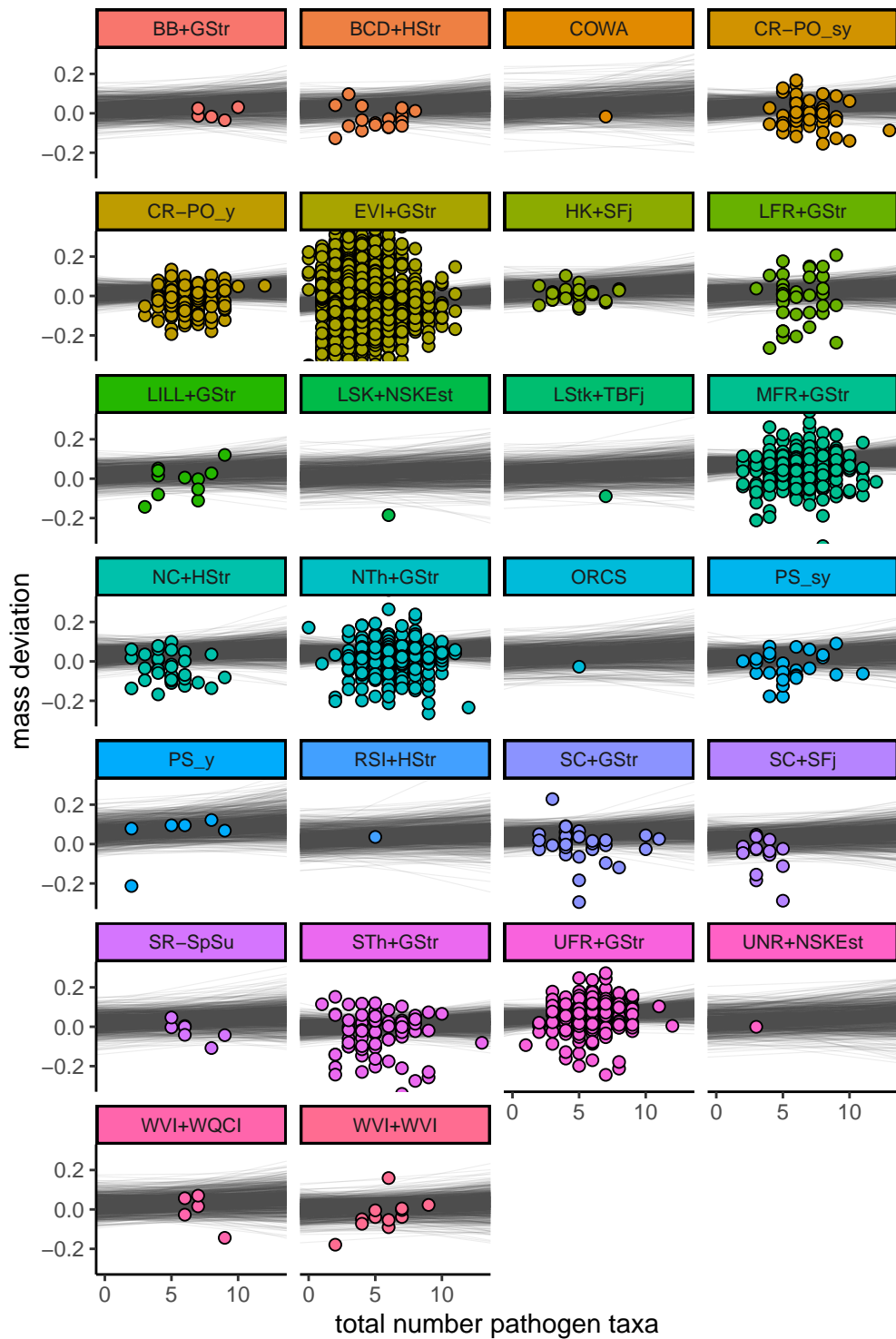
# Erythrocytic Necrosis Virus FaWi



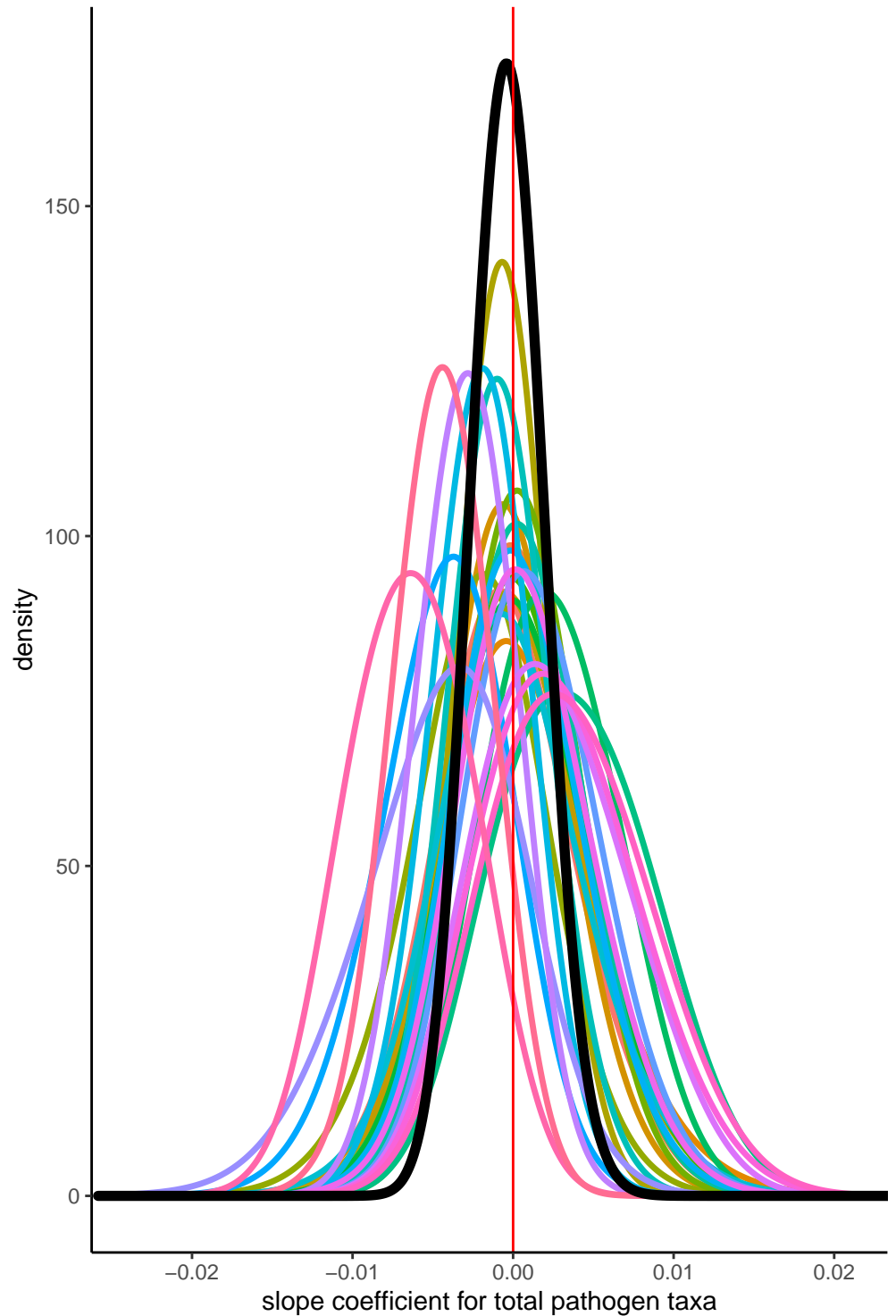
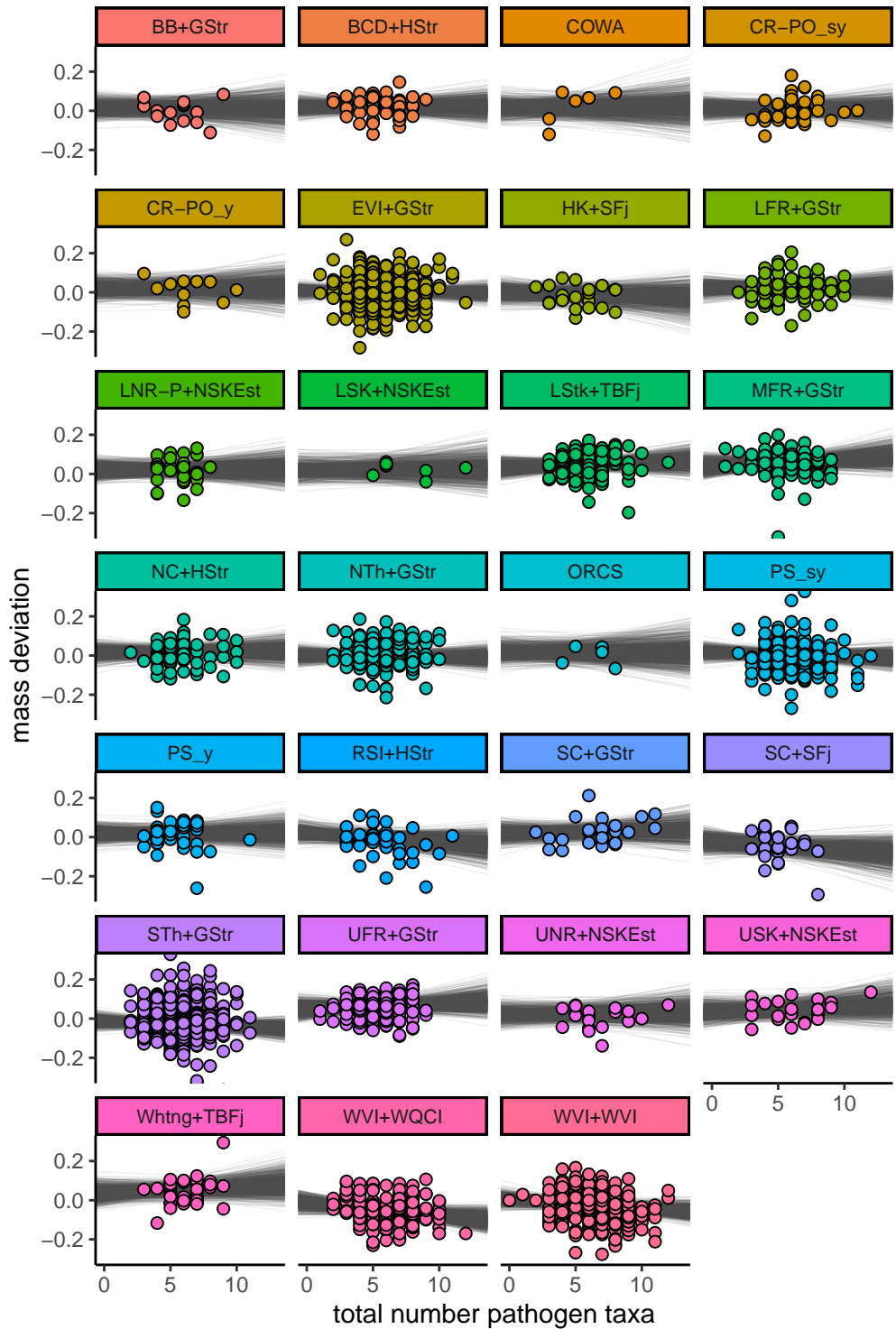
### Viral Hemorrhagic Septicemia Virus SpSu



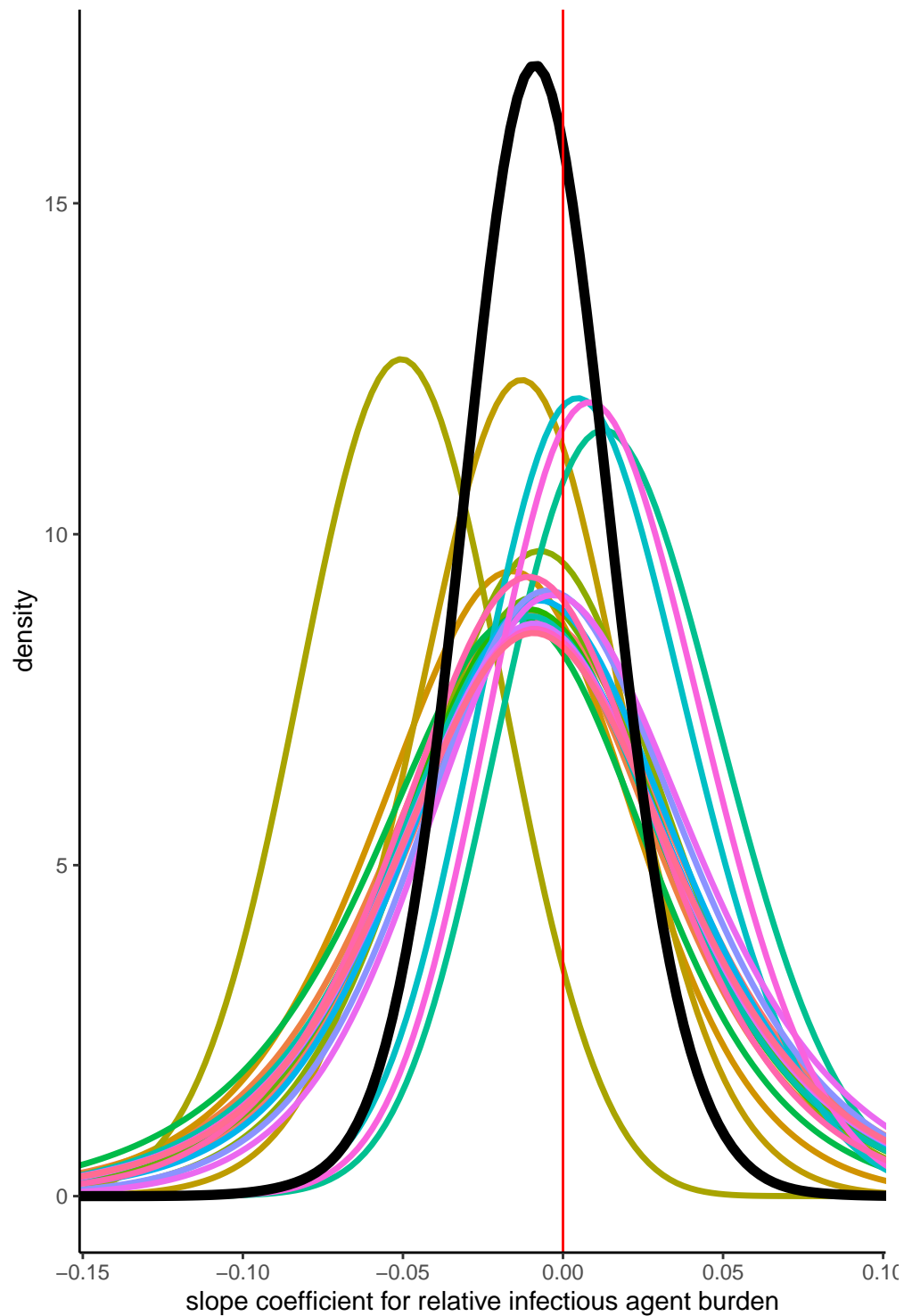
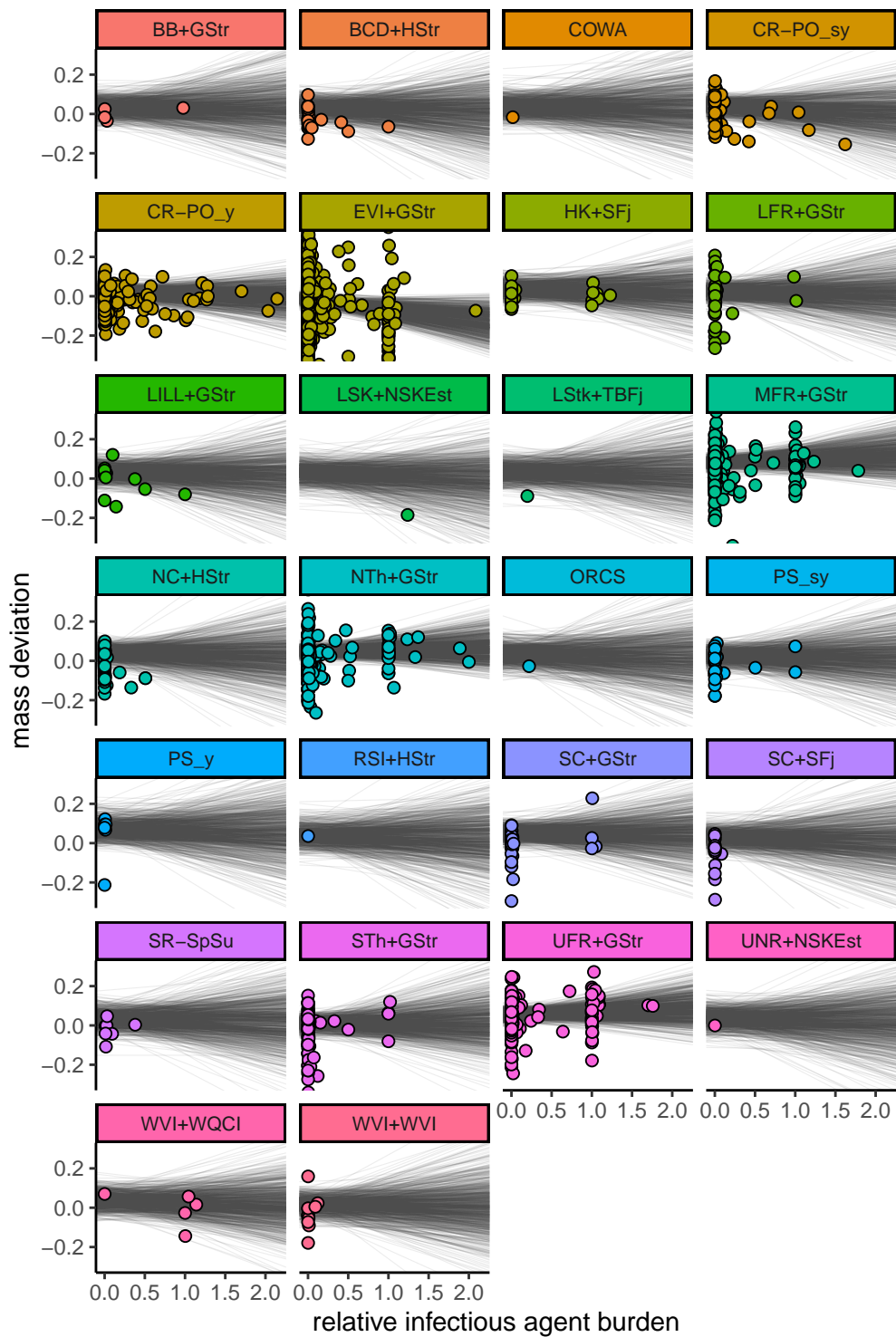
Total number of pathogen taxa SpSu



Total number of pathogen taxa FaWi



### Relative infectious agent burden SpSu



### Relative infectious agent burden FaWi

