

Figure 6-1. Topographic map of Satinleaf with location of survey transects (A1-A2, B1-B2, C1-C2, & D1-D2).

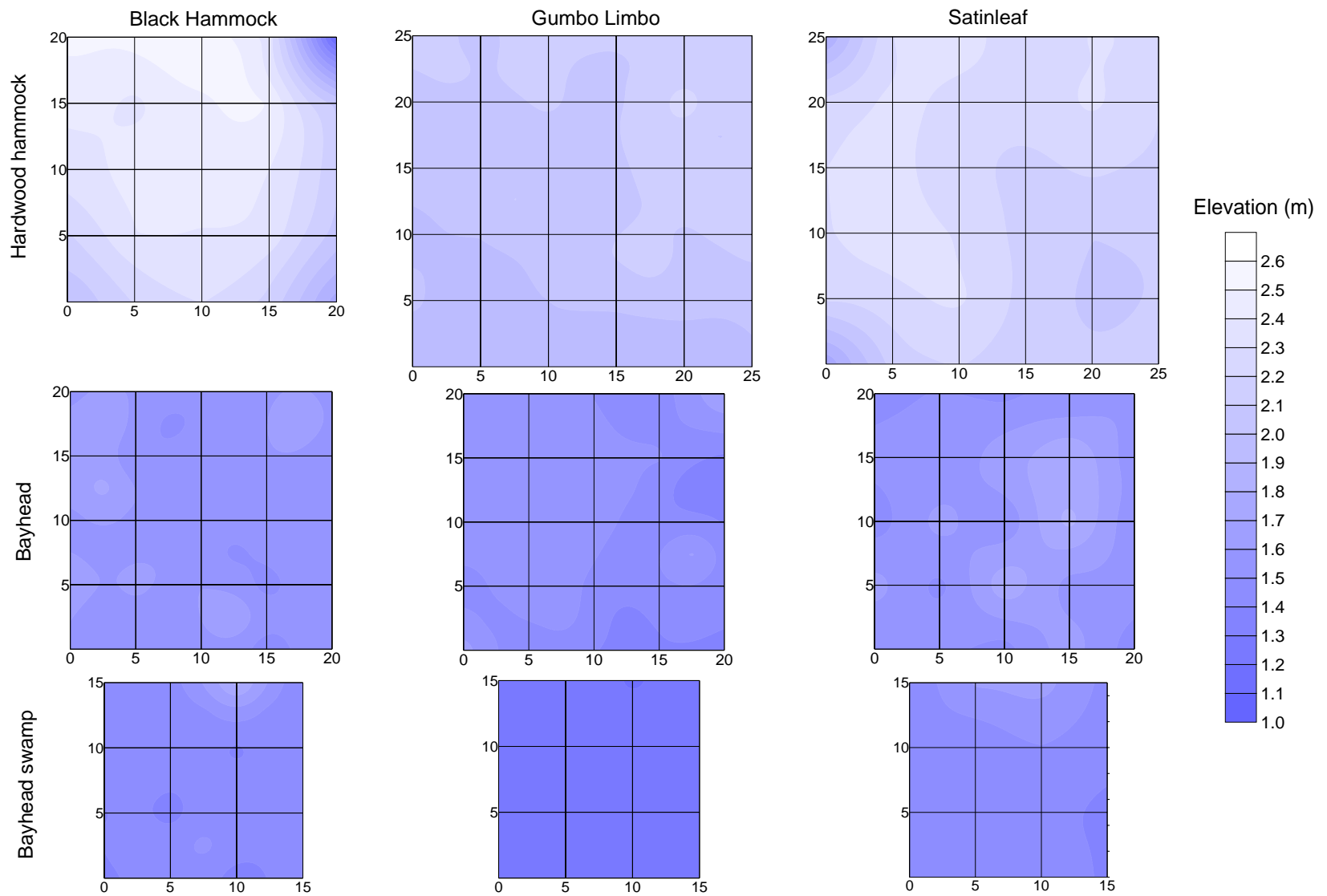


Figure 6-2. Tree island permanent plots (with surface topography shown) gridded into 5 x 5 m cells in the hardwood hammock, bayhead and bayhead swamp forests.

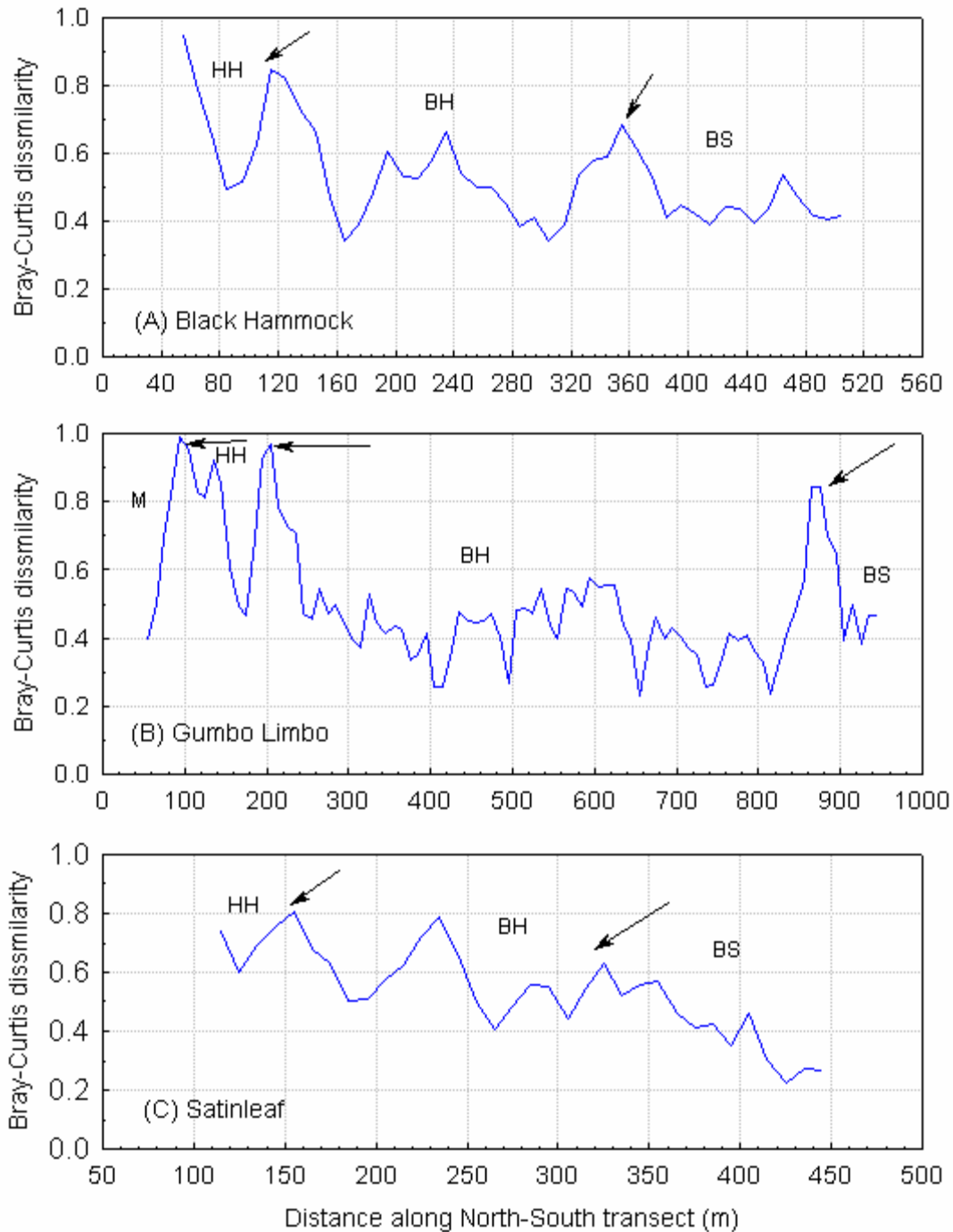


Figure 6-3. Bray-Curtis distance based on species cover along N-S transects on three Shark Slough tree islands for a window width of 6. HH, Hardwood hammock; BH, Bayhead; BS, Bayhead swamp; M, Marsh

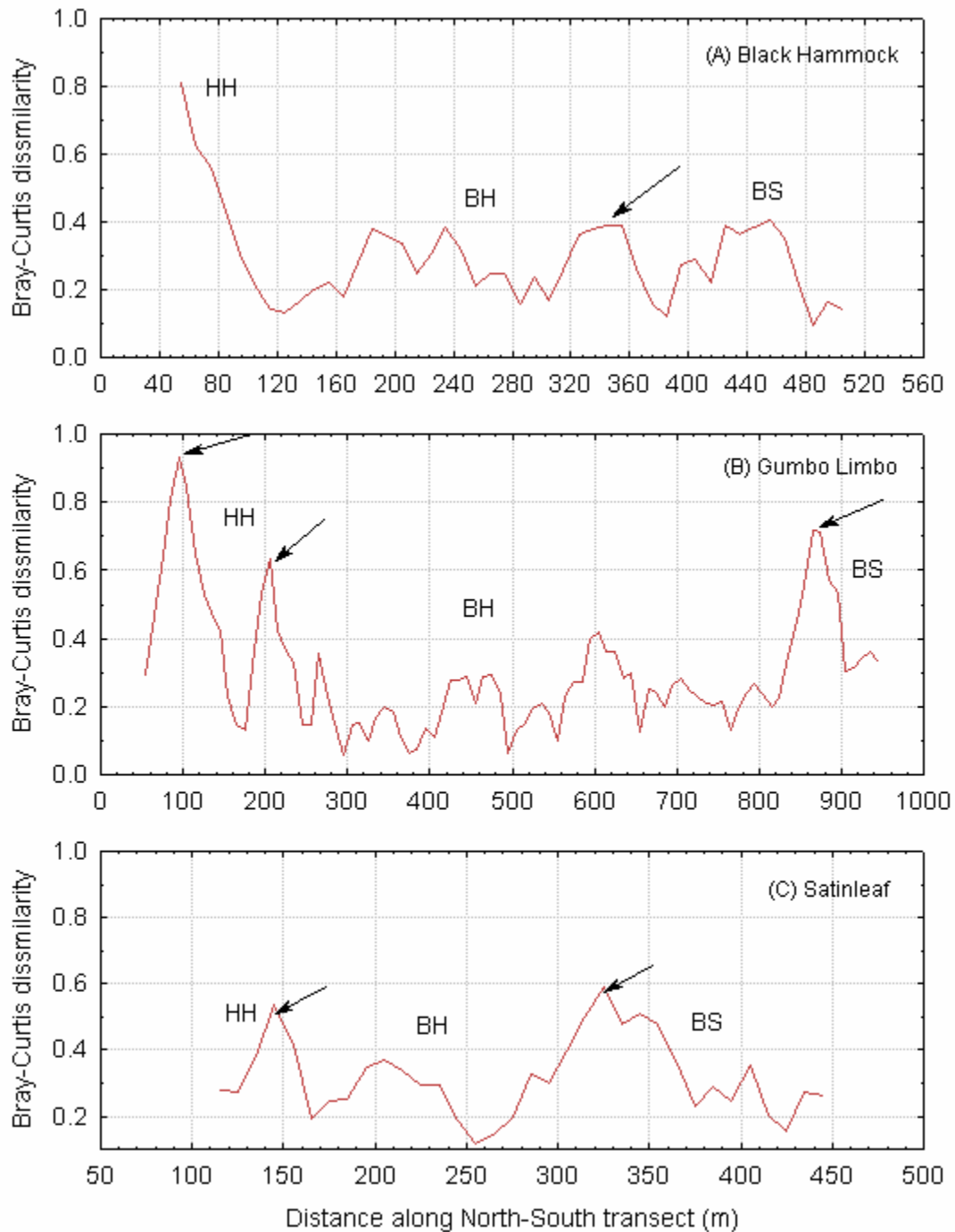


Figure 6-4. Bray-Curtis distance based on lifeform along N-S transects on three Shark Slough tree islands for a window width of 6. HH, hardwood hammock; BH, bayhead; BS, bayhead swamp; M, marsh.

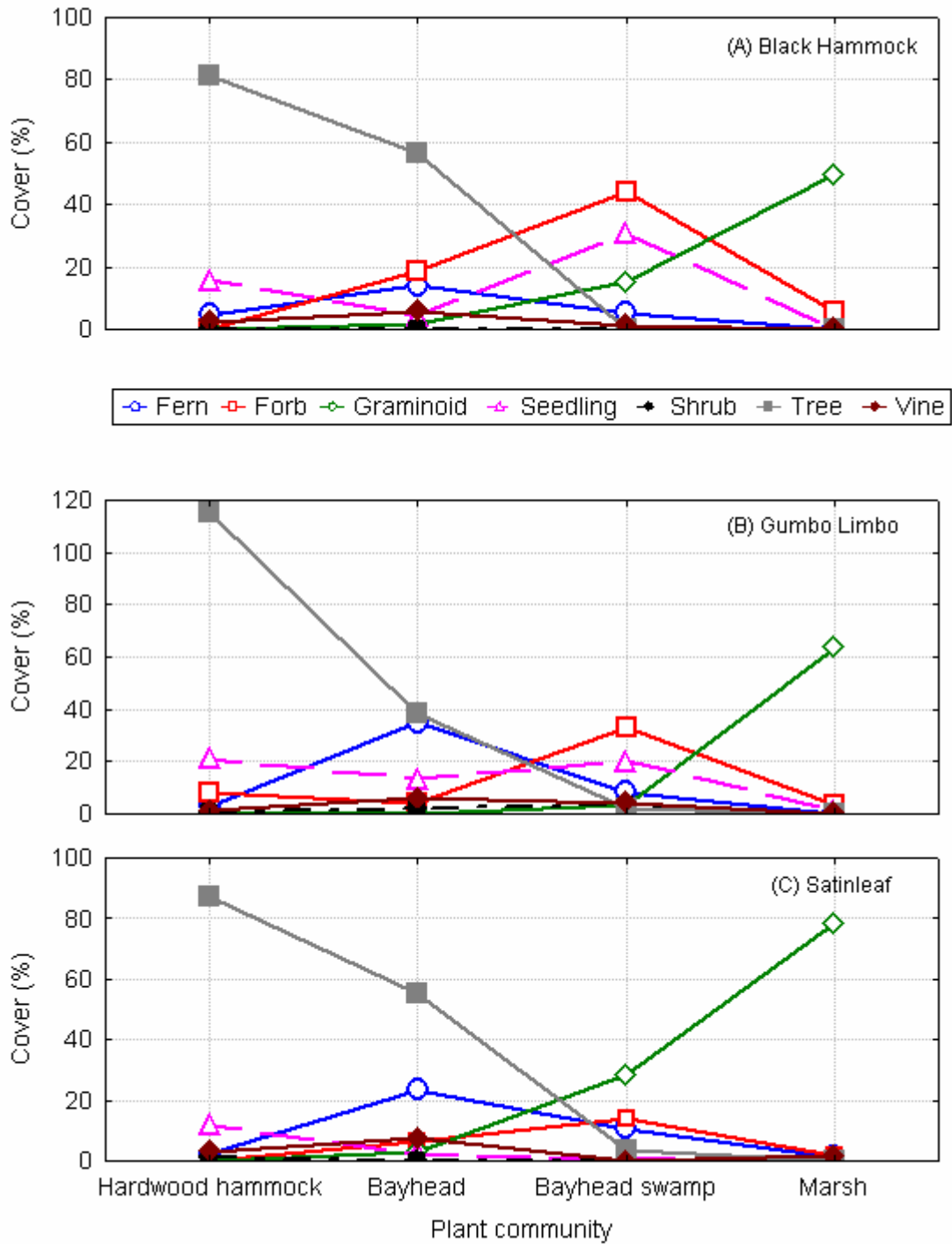


Figure 6-5. Mean cover of lifeforms in different plant communities along N-S transects on three Shark Slough tree islands.

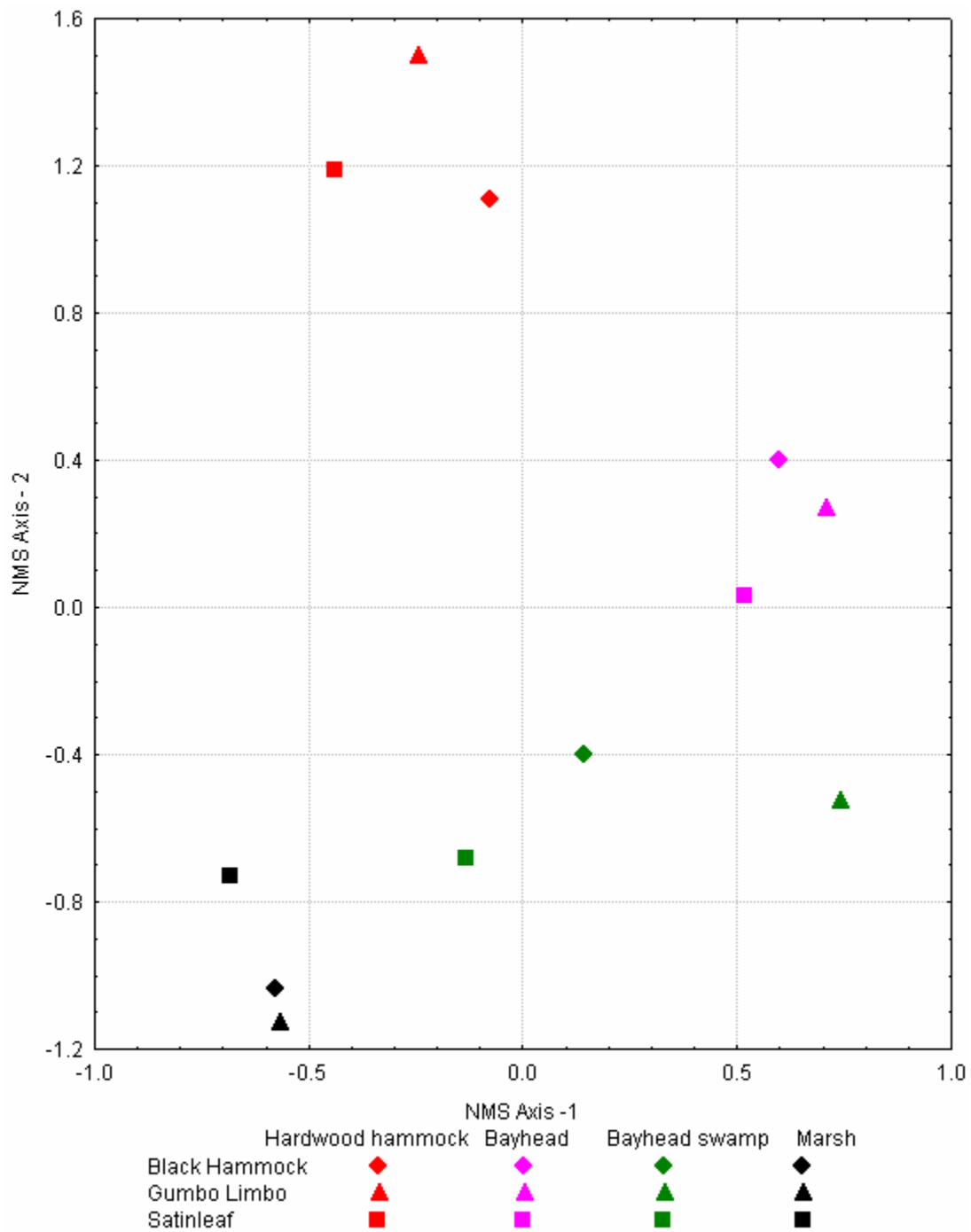


Figure 6-6. Bi-plots of Axis-1 and Axis-2 scores from NMS ordination of species abundance data collected along transects on three Shark Slough tree islands.

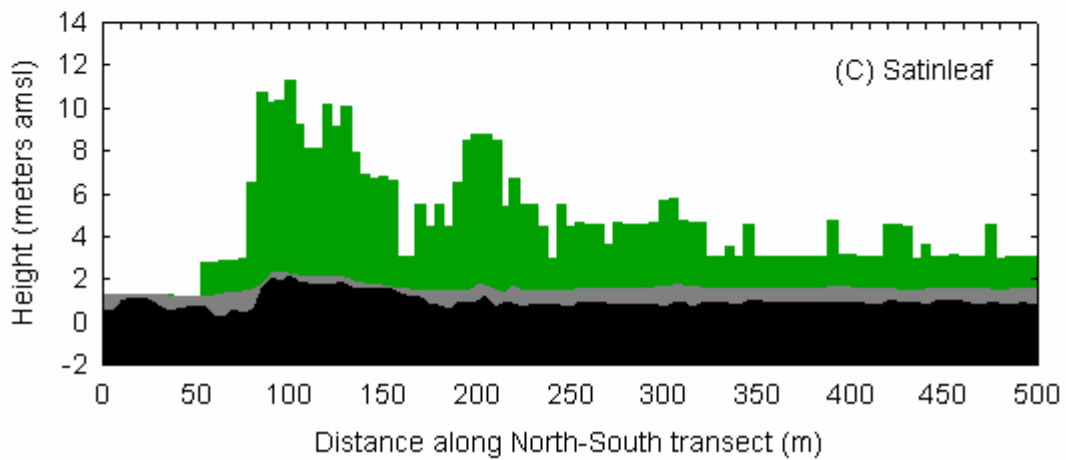
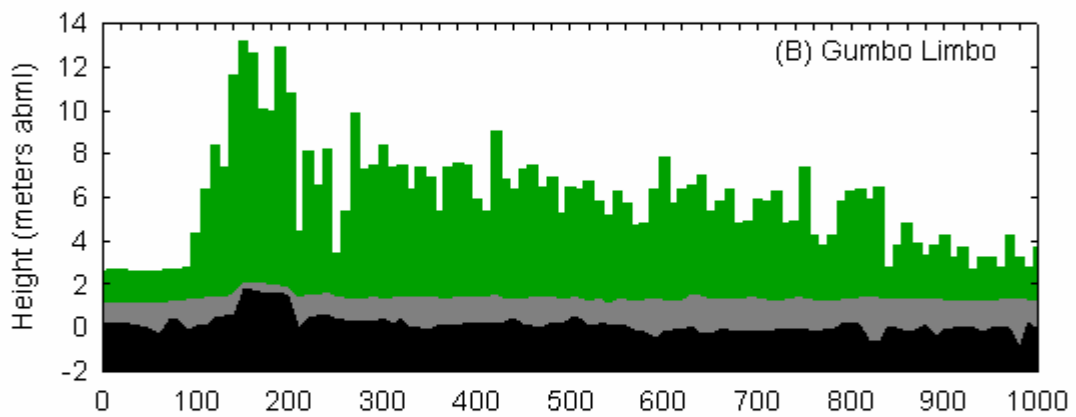
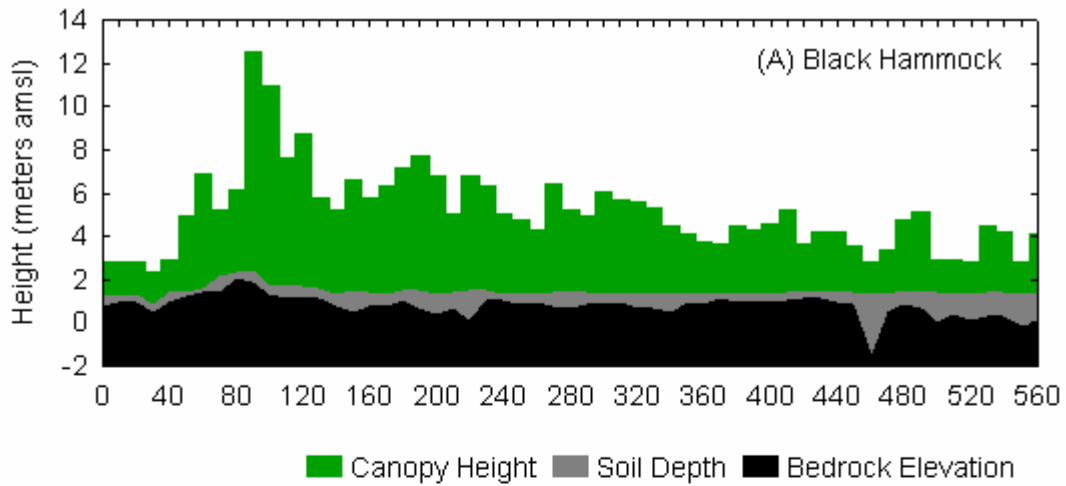
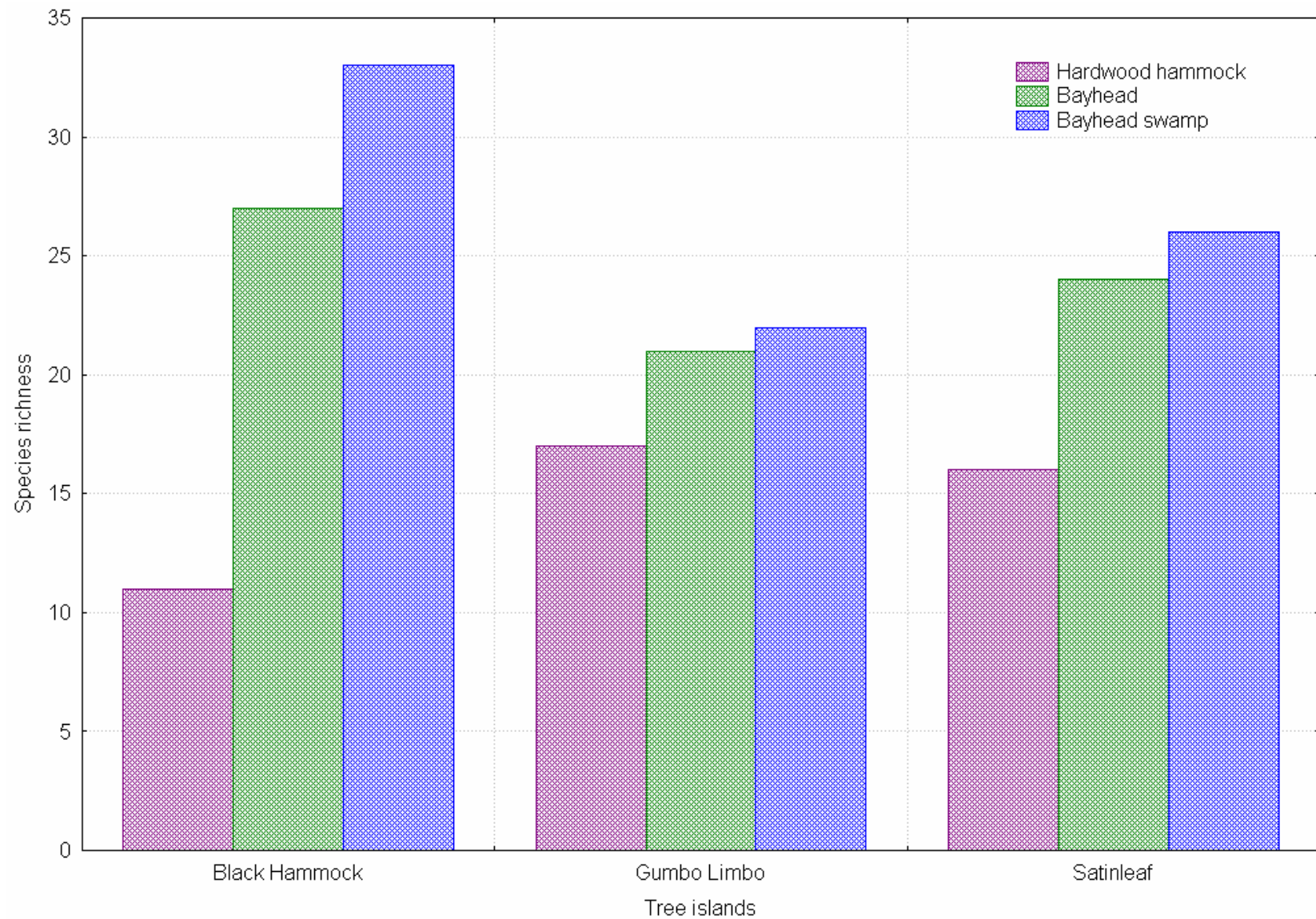


Figure 6-7. Canopy height, soil depth, and bedrock elevation along the long axis of Black Hammock, Gumbo Limbo and Satinleaf tree islands.



**Figure 6-8. Number of species (species richness) recorded in permanent plots established in hardwood hammock, bayhead and bayhead swamp forest communities on three Shark Slough tree islands.**



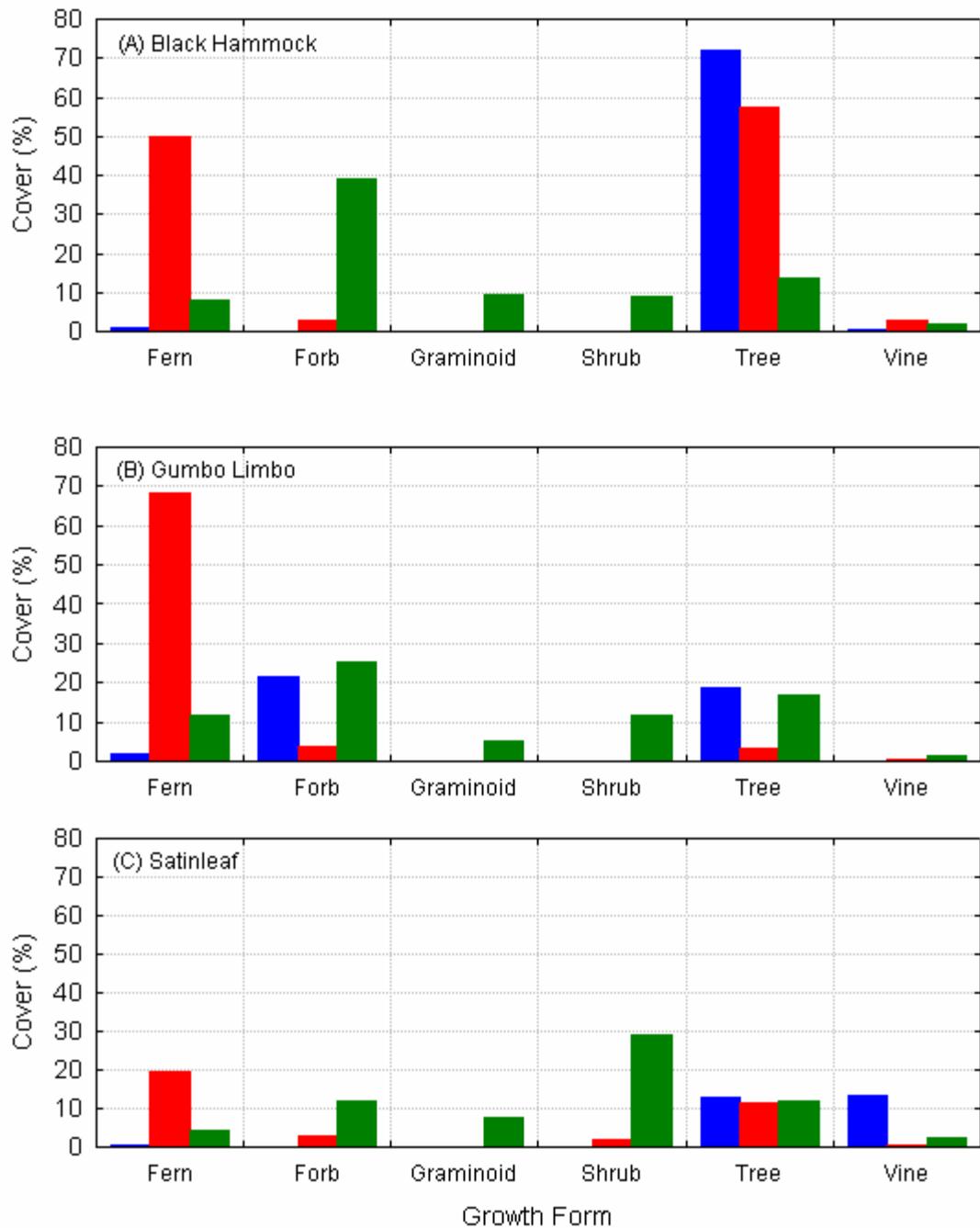
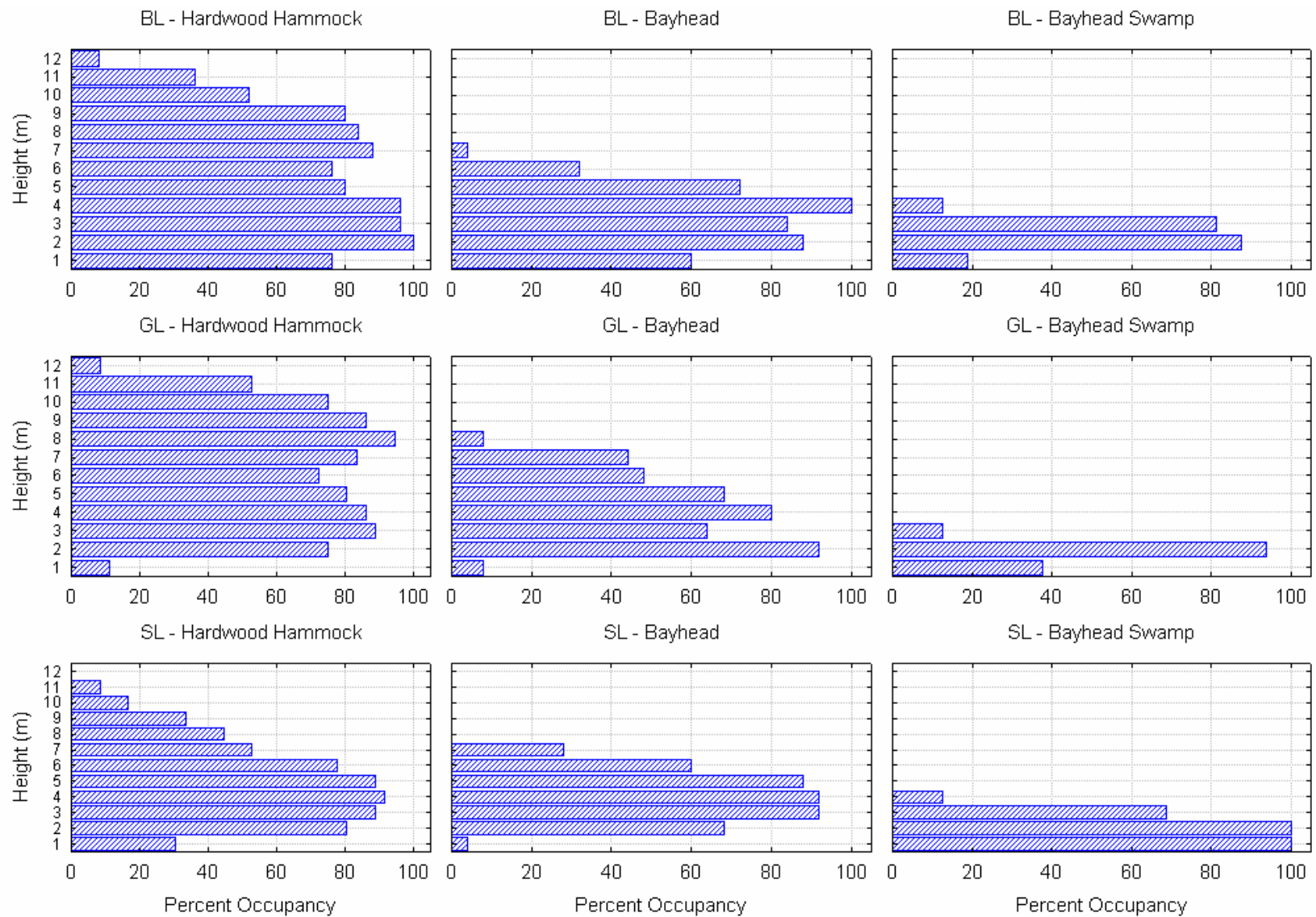


Figure 6-9. Cumulative percent cover of understory vegetation growth forms within the permanent plots of three Shark Slough tree islands.

■ Hardwood Hammock 
 ■ Bayhead 
 ■ Bayhead Swamp



**Figure 6-10. Frequency of canopy line intercept observations in permanent plots on three Shark Slough tree islands. BL, Black Hammock; GL, Gumbo Limbo; SL, Satinleaf.**

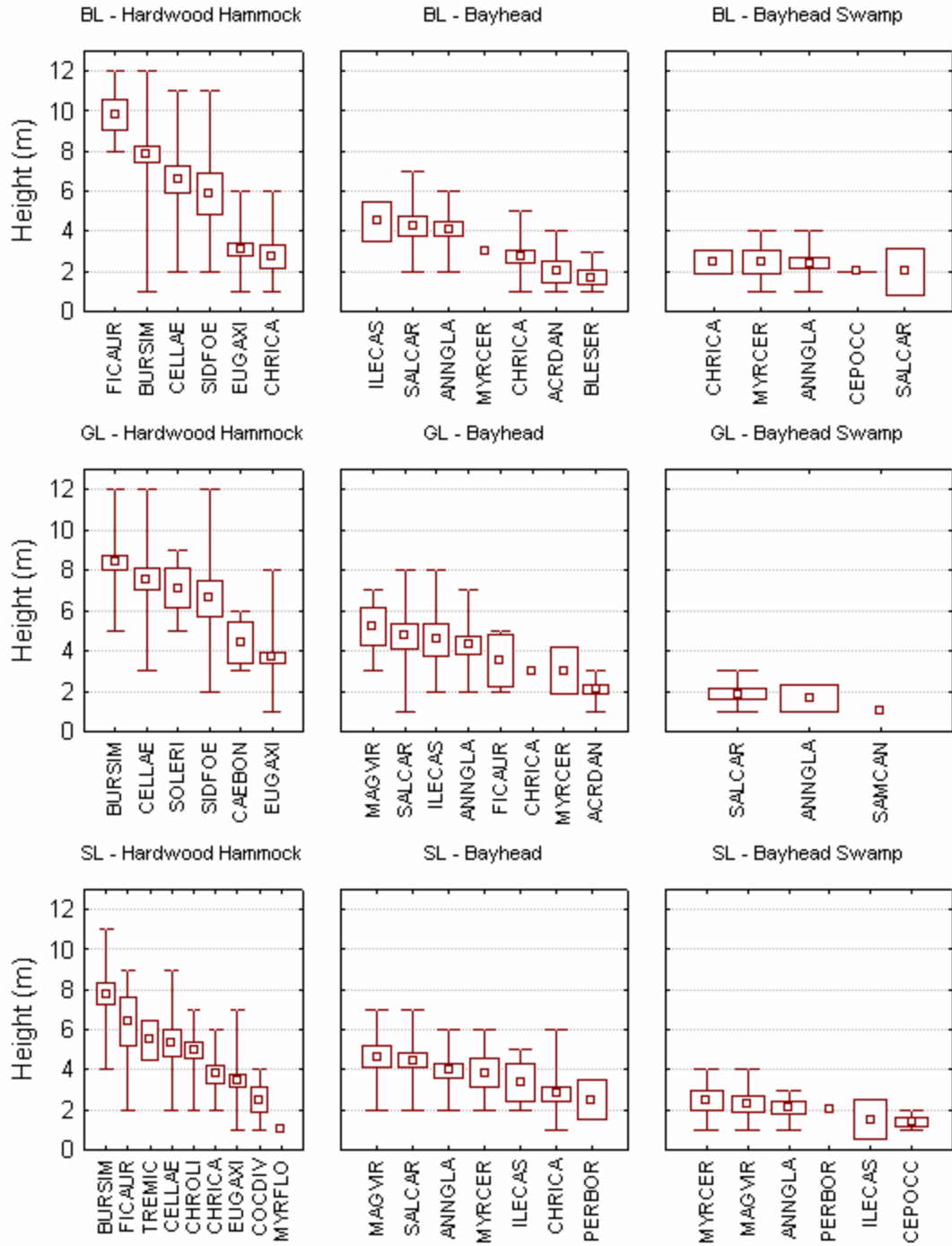


Figure 6-11. Mean canopy line intercept heights for species in permanent plots on three Shark Slough tree islands. BL, Black Hammock; GL, Gumbo Limbo; SL, Satinleaf. See Appendix 6 -1 for species codes.

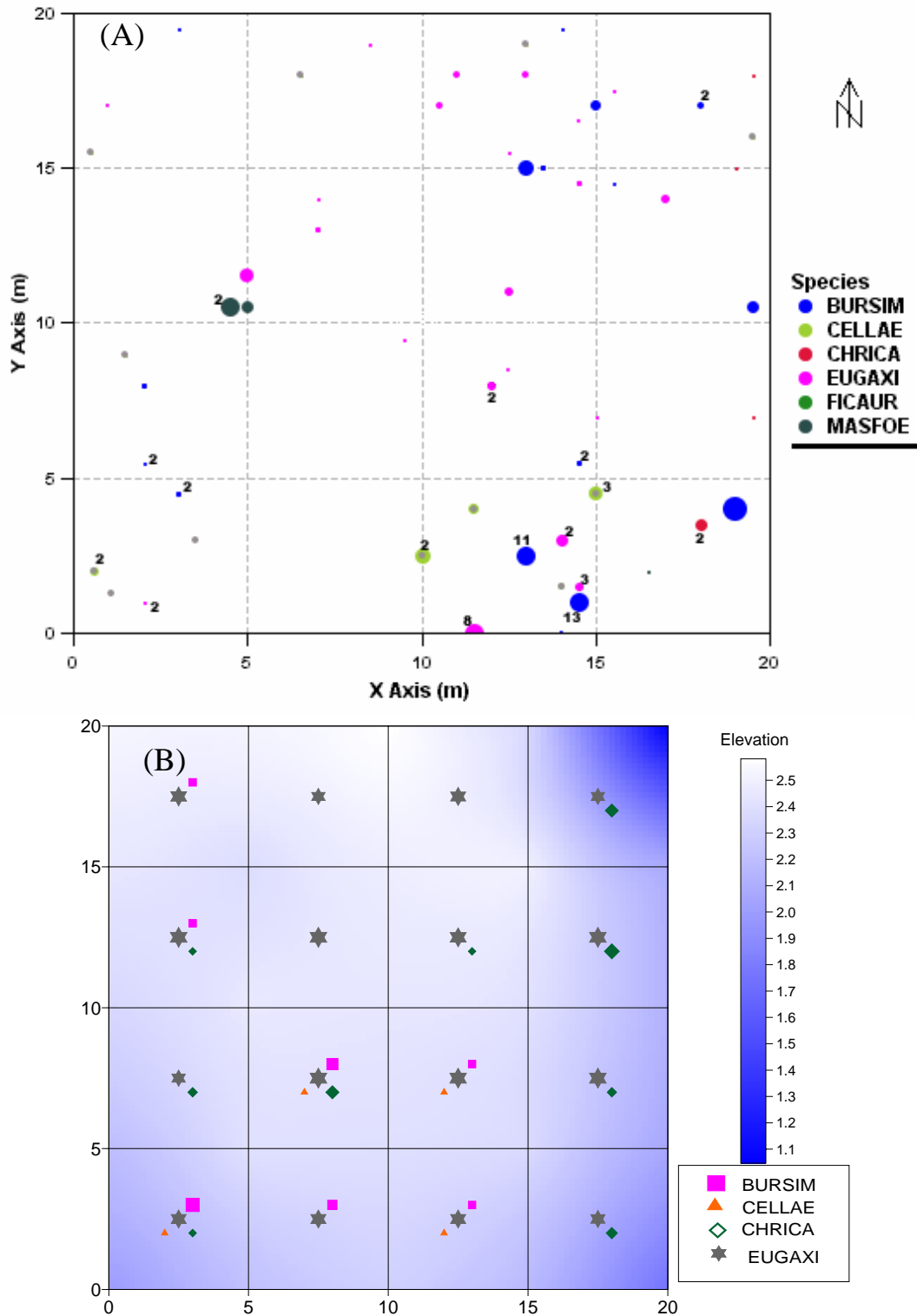


Figure 6-12. Horizontal distribution of (A) trees and (B) seedlings within the hardwood hammock plot in Black Hammock (size of symbols is approximately to scale). Numbered points represent multi-stemmed individuals and their corresponding number of stems. See Appendix 6-1 for species codes.

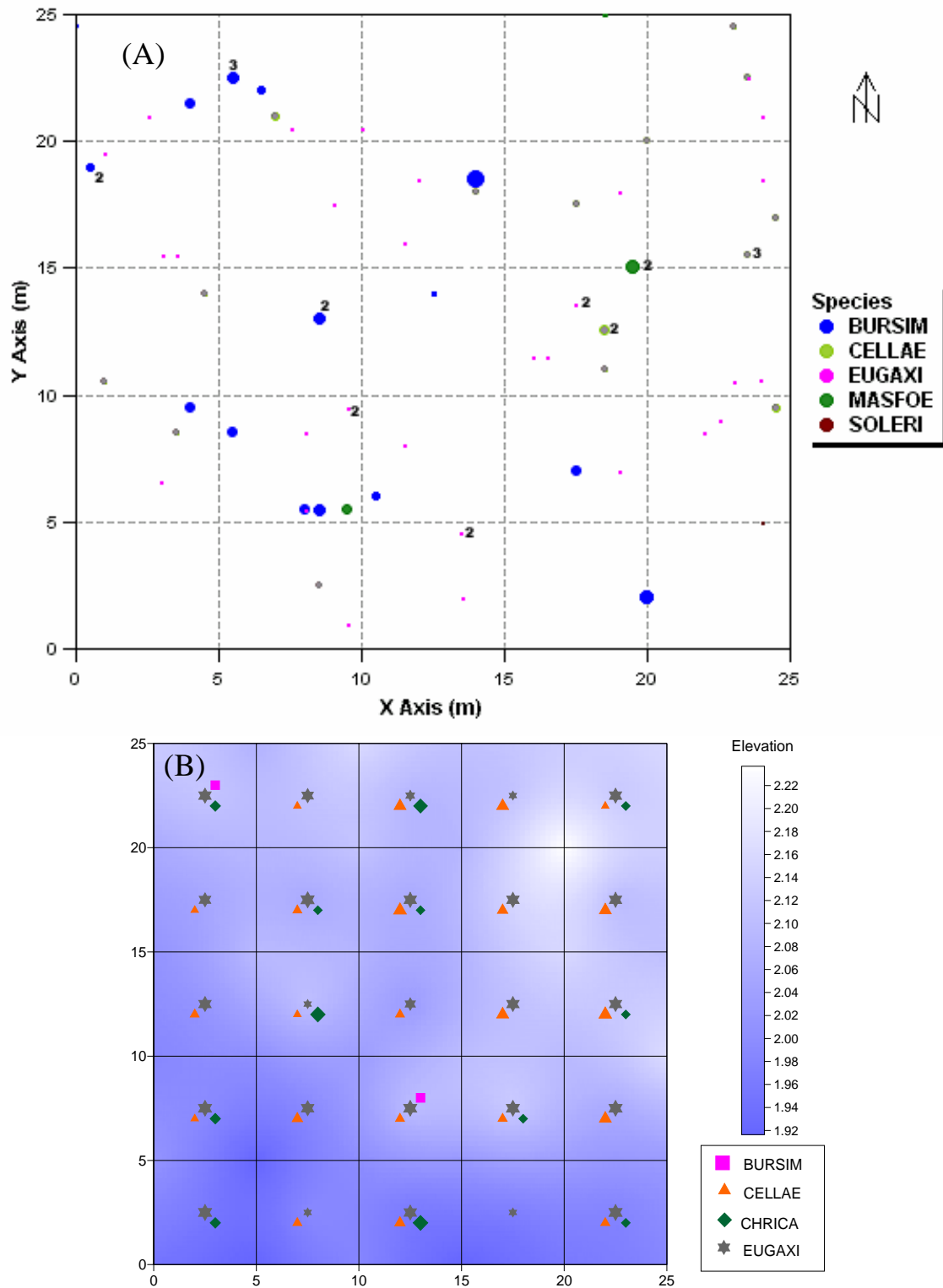


Figure 6-13. Horizontal distribution of (A) trees and (B) seedlings within the hardwood hammock plot in Gumbo Limbo (size of symbols is approximately to scale). Numbered points represent multi-stemmed individuals and their corresponding number of stems. See Appendix 6-1 for species codes.

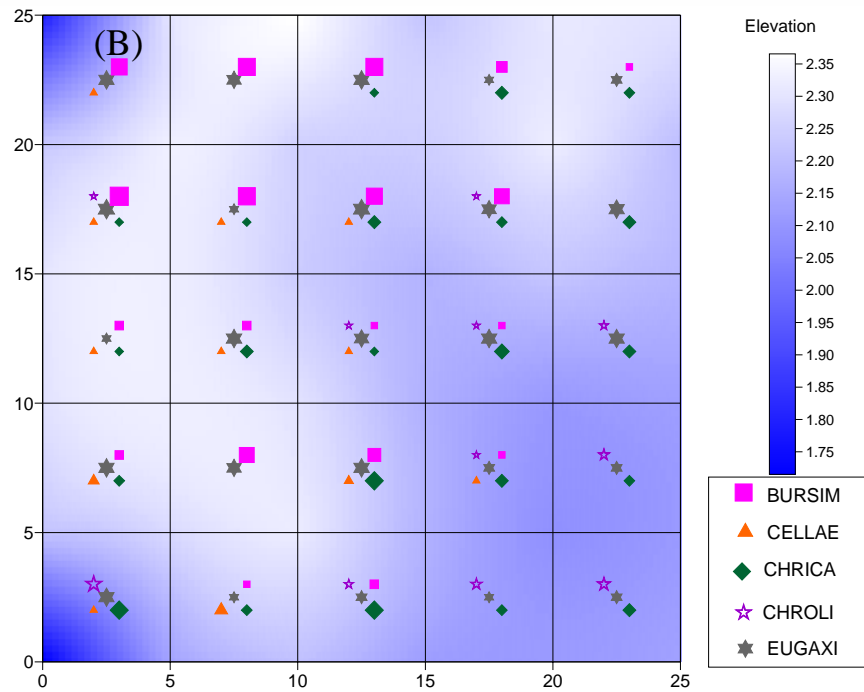
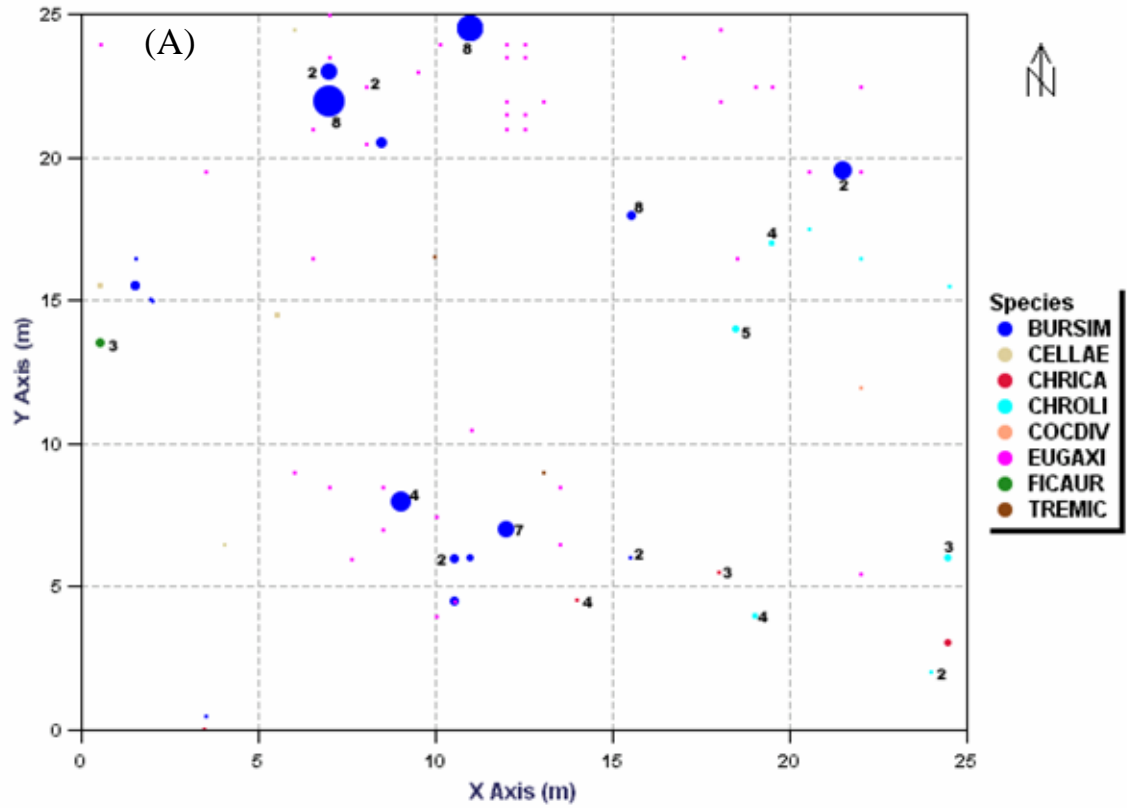


Figure 6-14. Horizontal distribution of (A) trees and (B) seedlings within the hardwood hammock plot in Satinleaf (size of symbols is approximately to scale). Numbered points represent multi-stemmed individuals and their corresponding number of stems. See Appendix 6-1 for species codes.

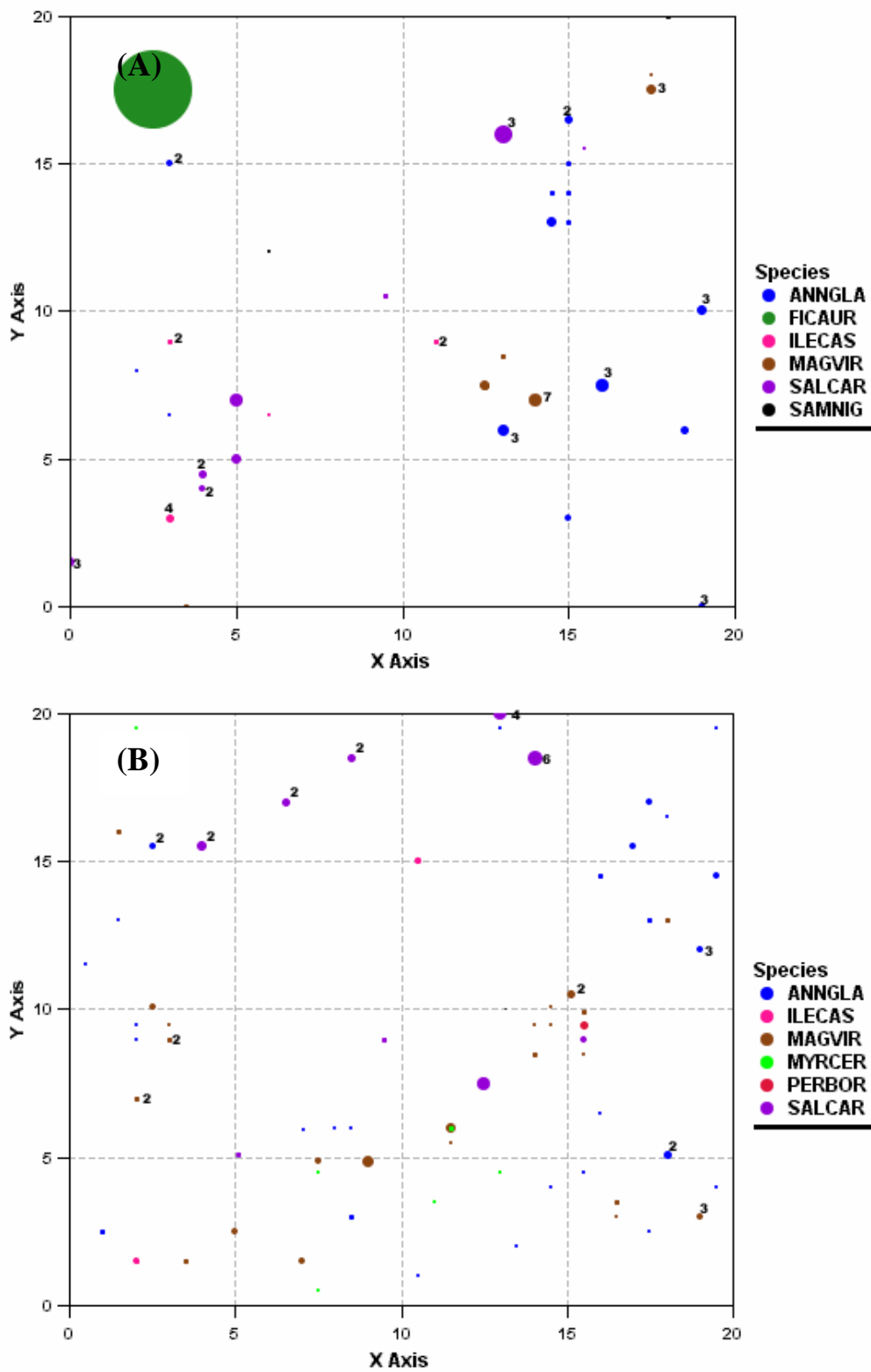


Figure 6-15. Horizontal distribution of trees within the bayhead plots in (A) Gumbo Limbo and (B) Satinleaf (dot size is approximately to scale). Numbered points represent multi-stemmed individuals and their corresponding number of stems. See Appendix 6-1 for species codes.

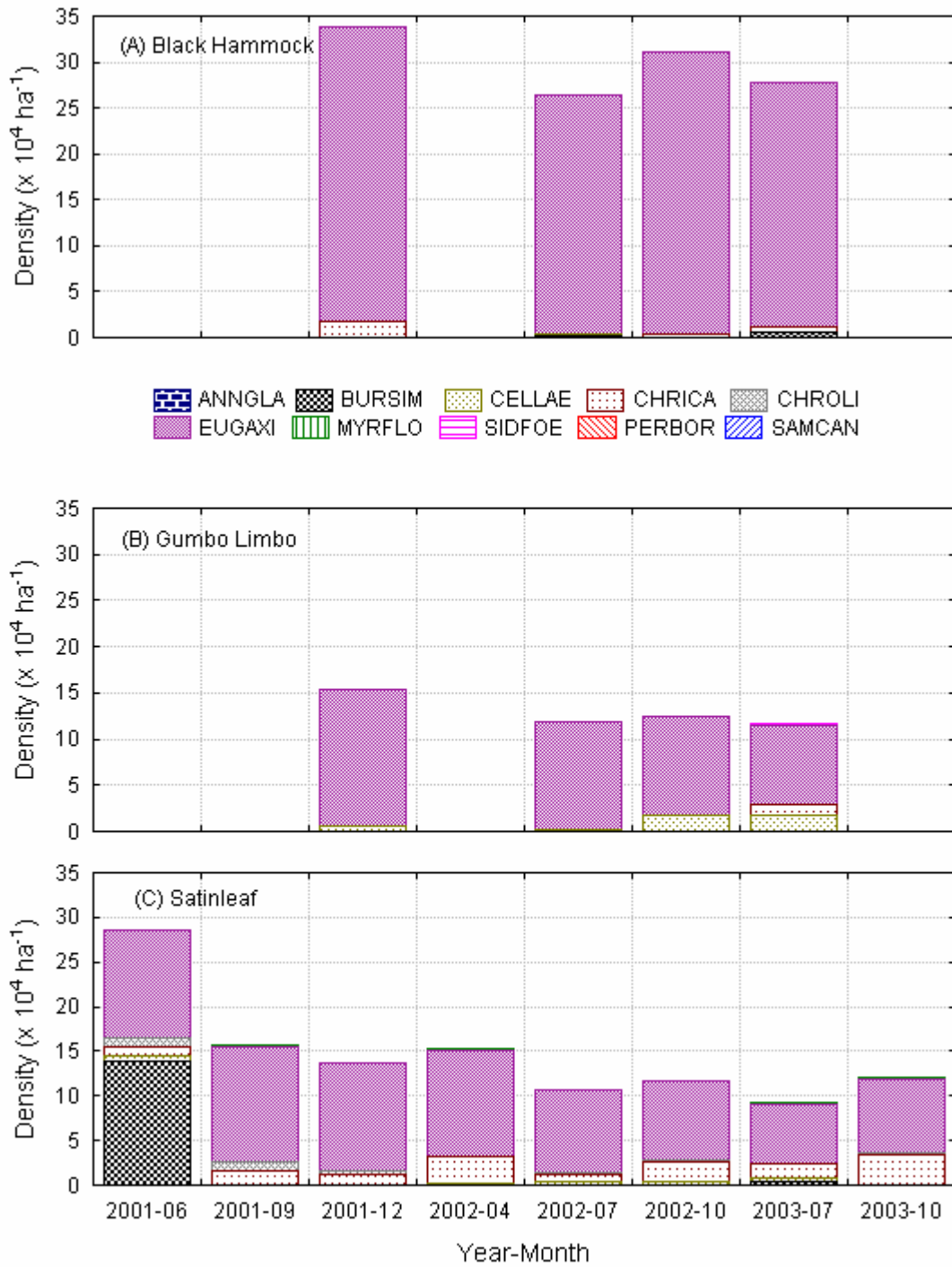


Figure 6-16. Seedling densities, by species, at different sampling times for three Shark Slough tree islands. See Appendix 6-1 for species codes.



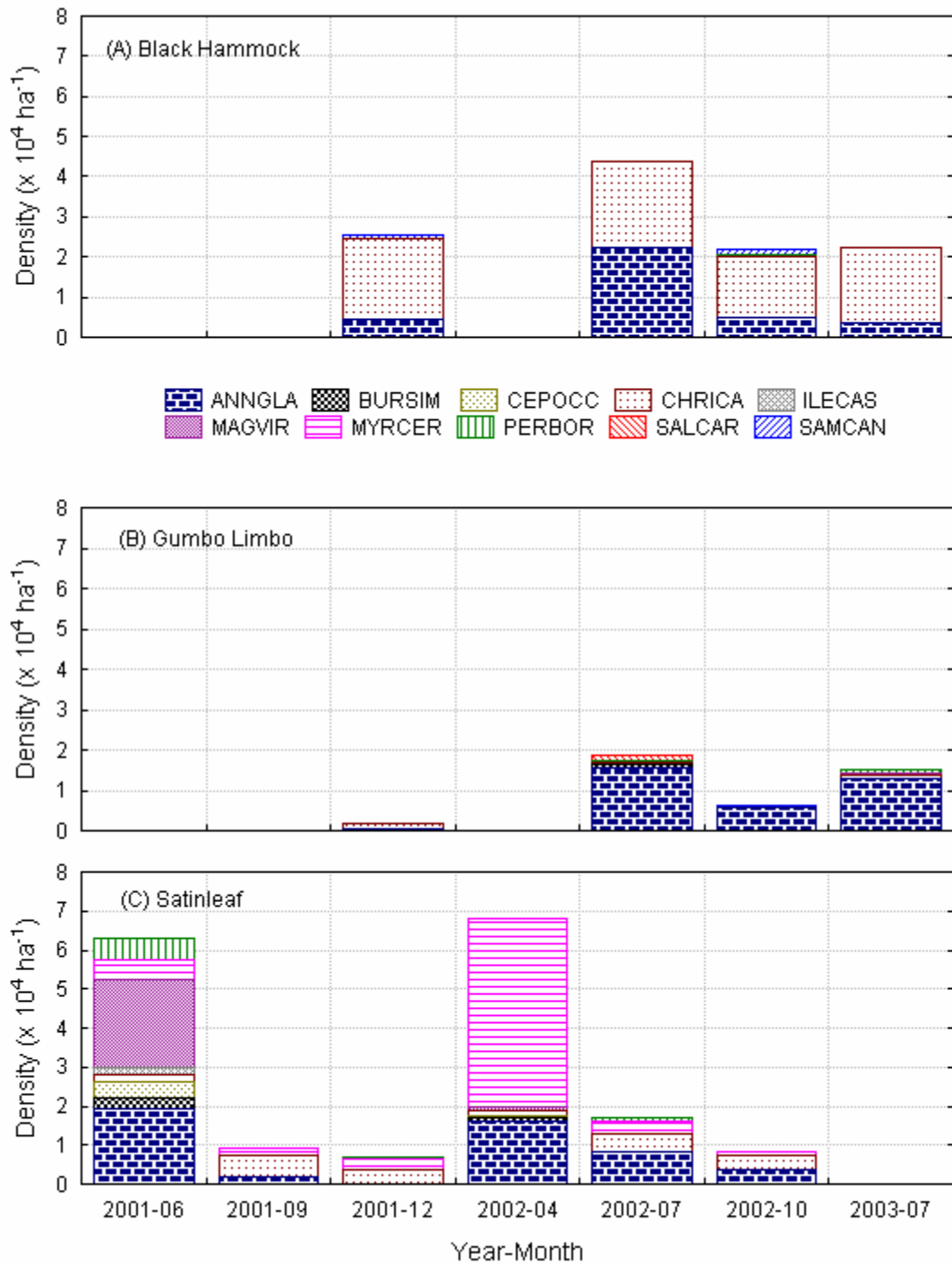


Figure 6-17. Seedling densities, by species, in bayheads of three Shark Slough tree islands. See Appendix 6-1 for species codes.

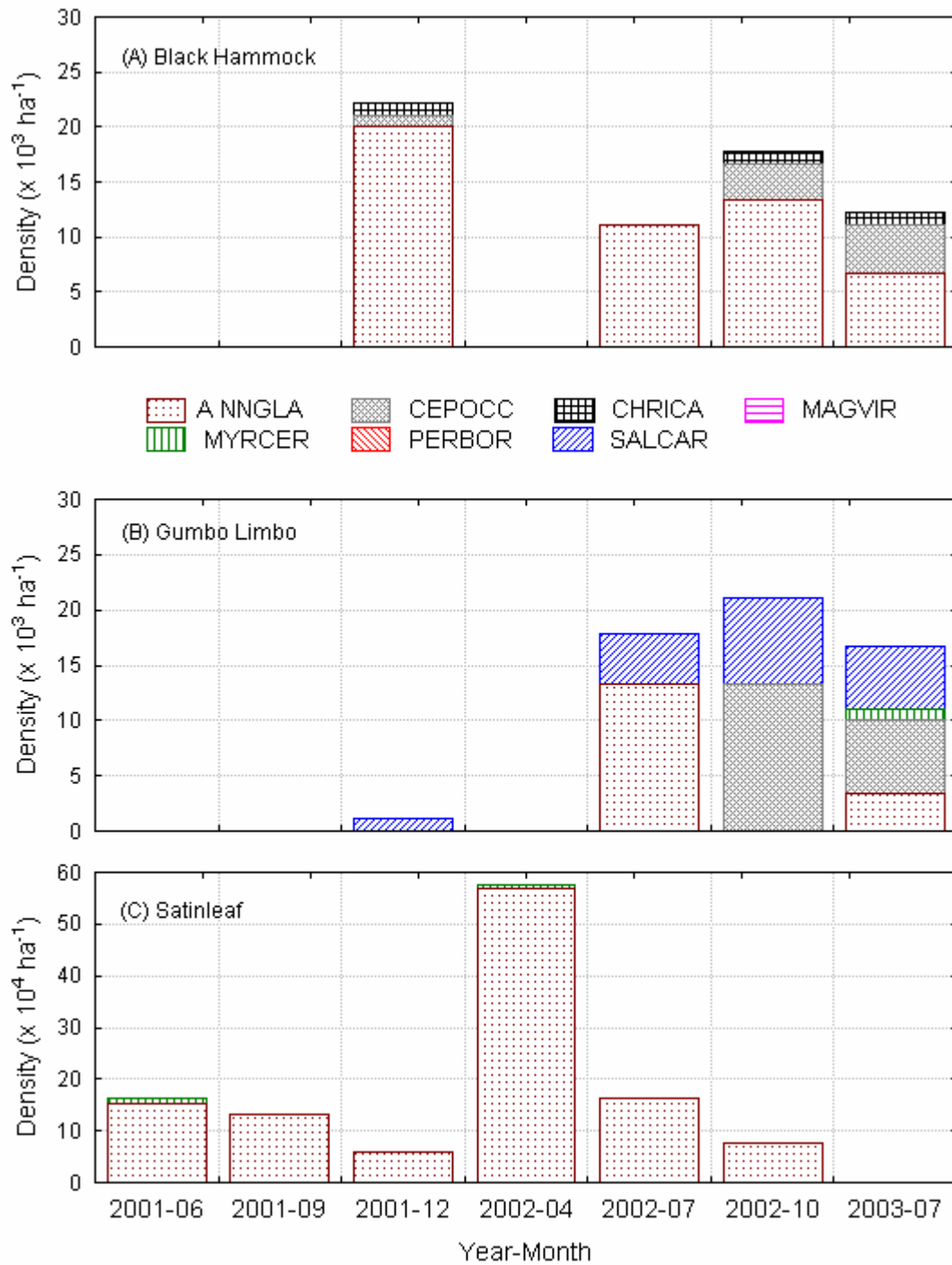


Figure 6-18. Seedling densities, by species, in bayhead swamps of three Shark Slough tree islands. See Appendix 6-1 for species codes.

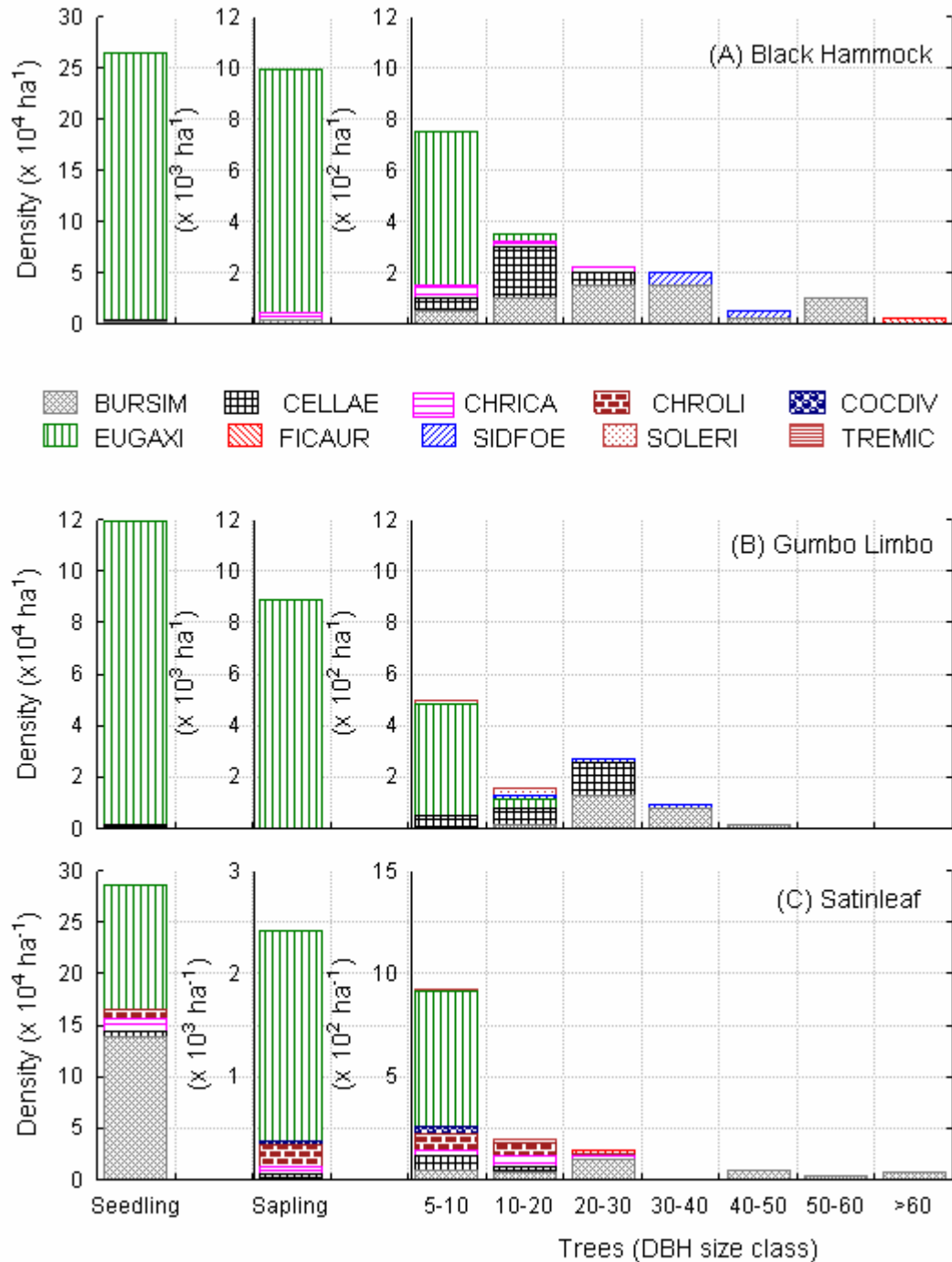


Figure 6-19. Densities of seedlings, saplings and different sized trees in hardwood hammocks of three Shark Slough tree islands. Trees are grouped by DBH size class. See Appendix 6-1 for species codes.

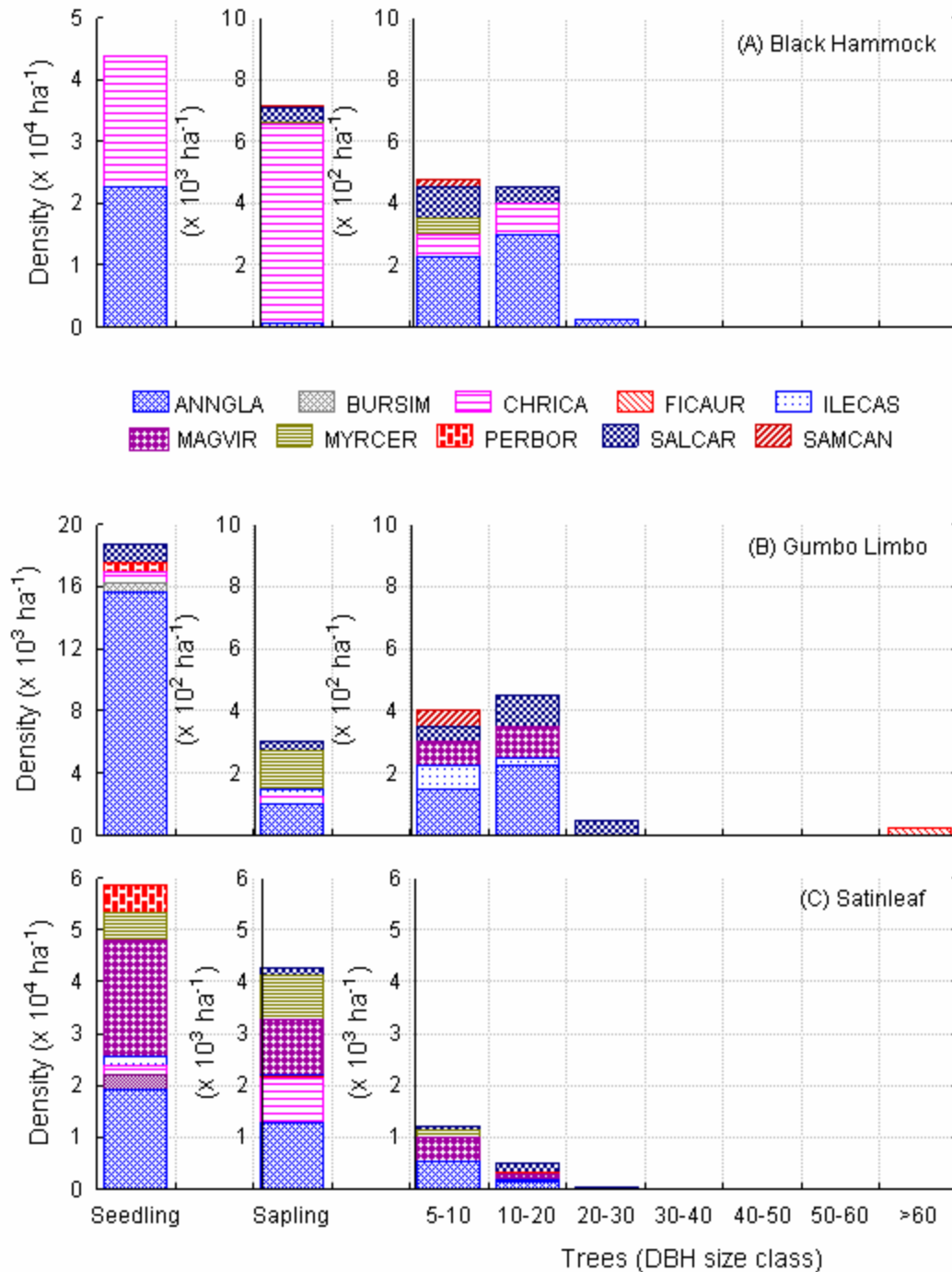


Figure 6-20. Densities of seedlings, saplings and different sized trees in bayheads of three Shark Slough tree islands. Trees are grouped by DBH size class. See Appendix 6-1 for species codes.

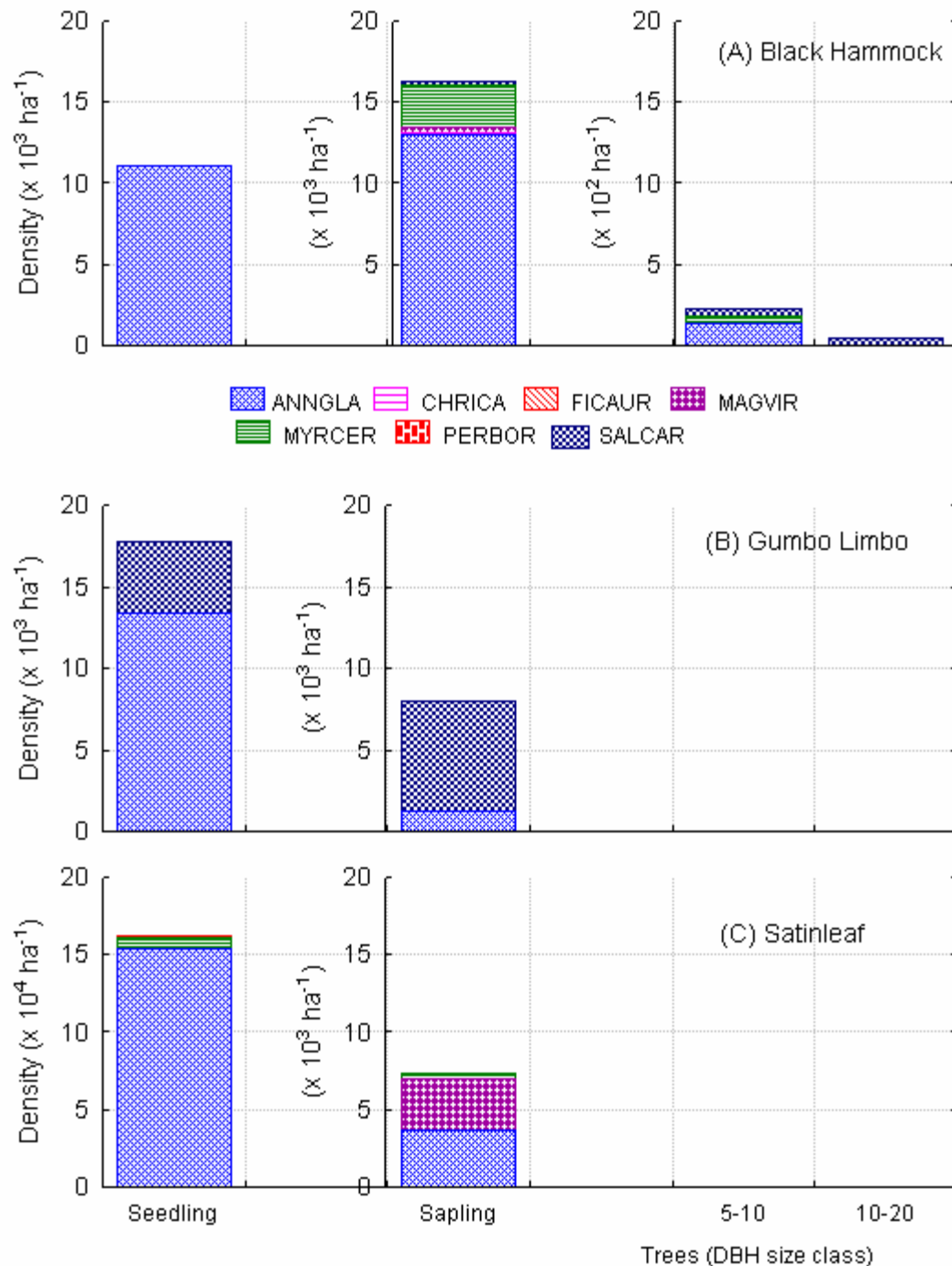


Figure 6-21. Densities of seedlings, saplings and different sized trees in bayhead swamps of three Shark Slough tree islands. Trees are grouped by DBH size class. See Appendix 6-1 for species codes.

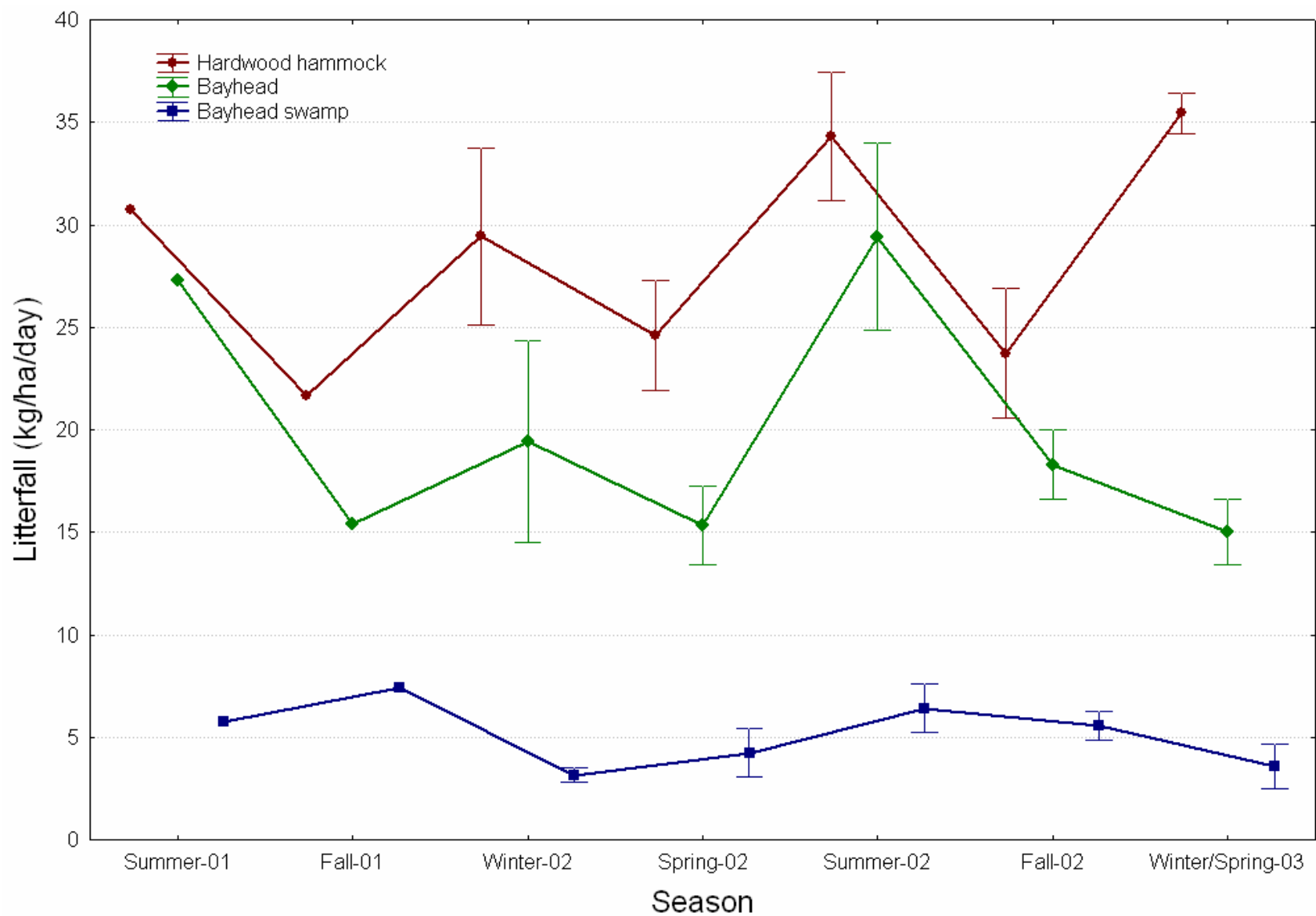


Figure 6-22. Seasonal mean litterfall in three plant communities of Shark Slough tree islands.

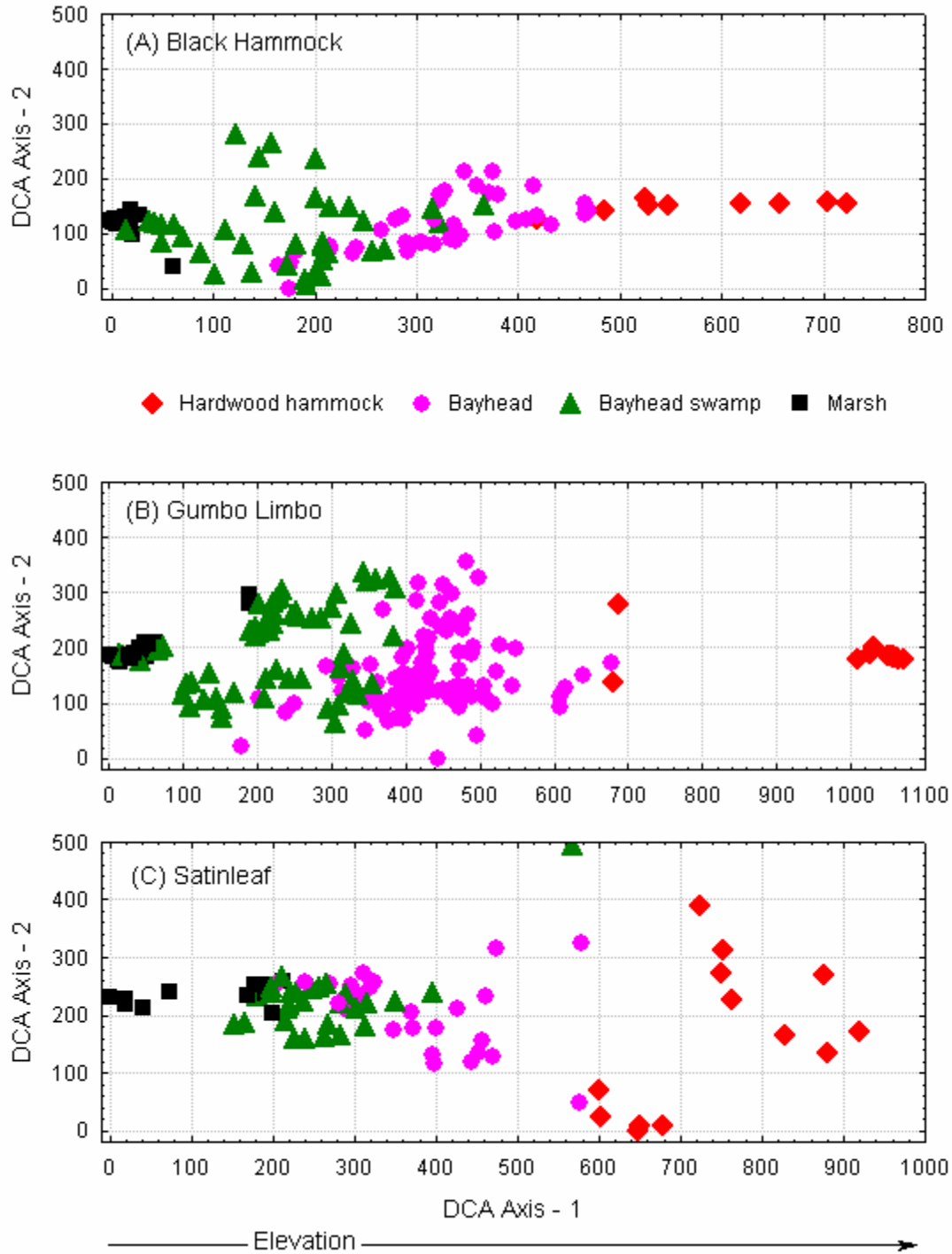


Figure 6-23. Bi-plots of Axis-1 and Axis-2 scores from DCA analysis of species abundance data collected along four transects on each of three Shark Slough tree islands.

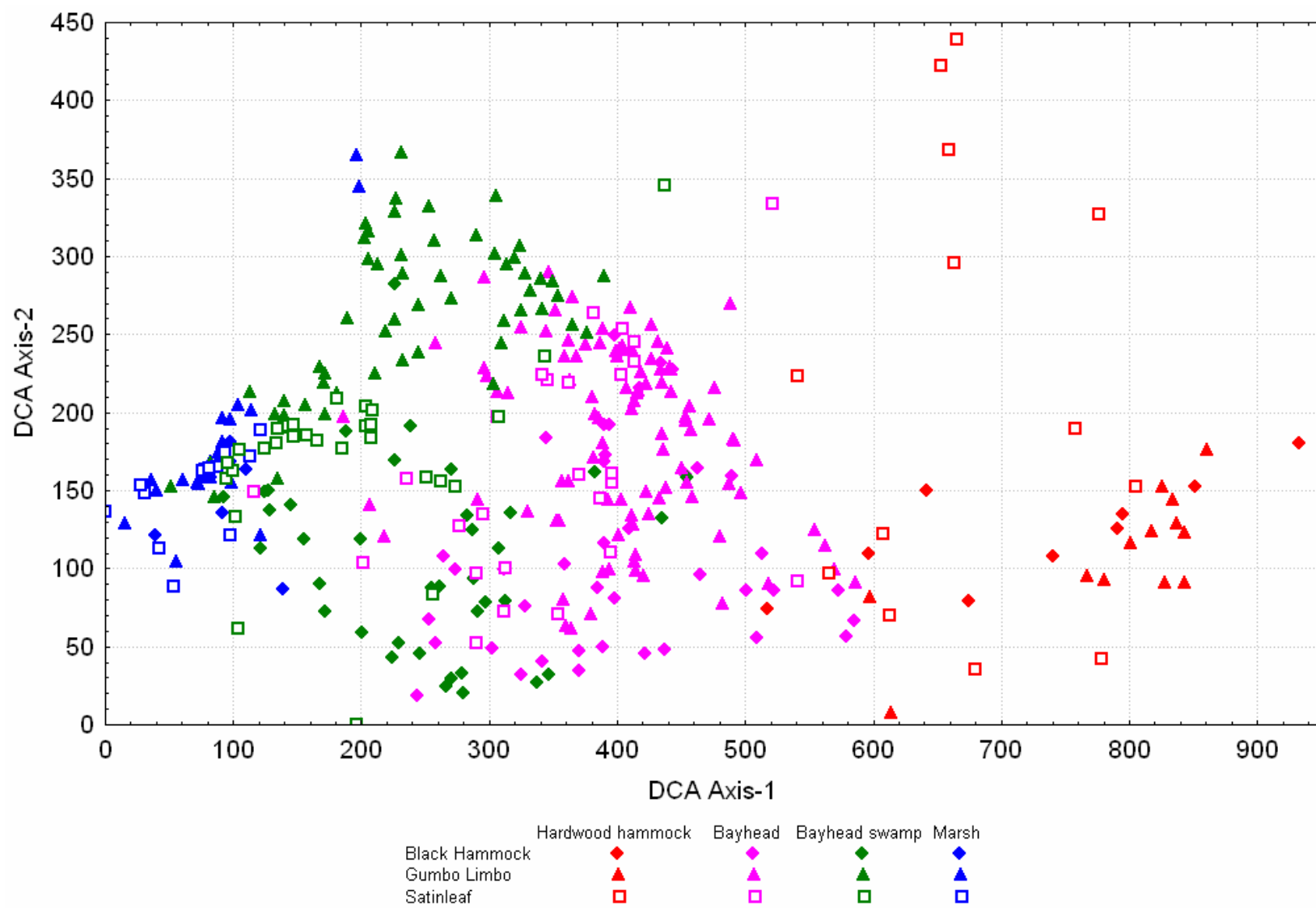


Figure 6-24. Bi-plots of Axis-1 and Axis-2 scores from DCA analysis of herb and shrub abundance data collected along transects at three Shark Slough tree islands.



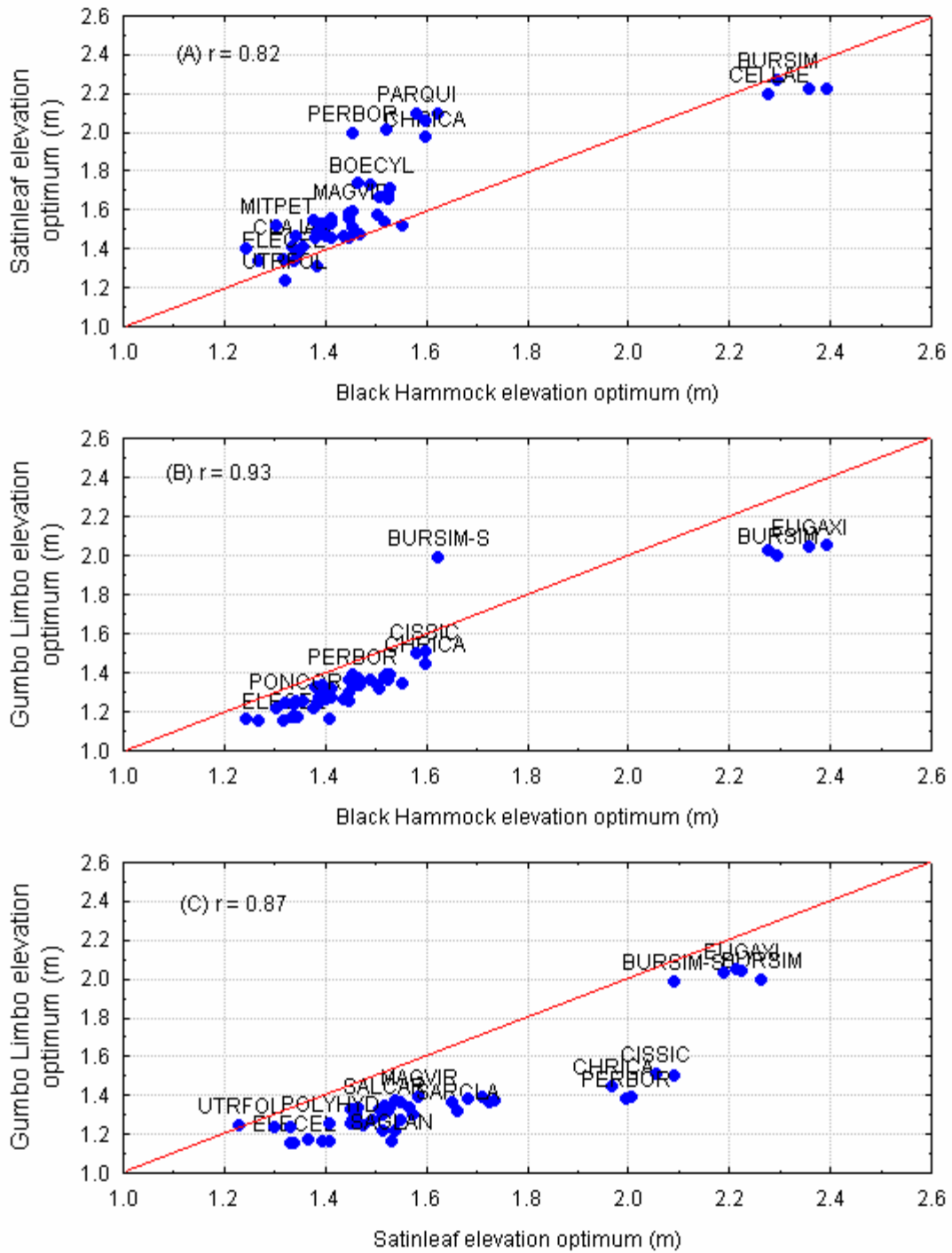


Figure 6-25. Elevation optima comparison among three Shark Slough tree islands for species in common. See Appendix 6-1 for species codes.

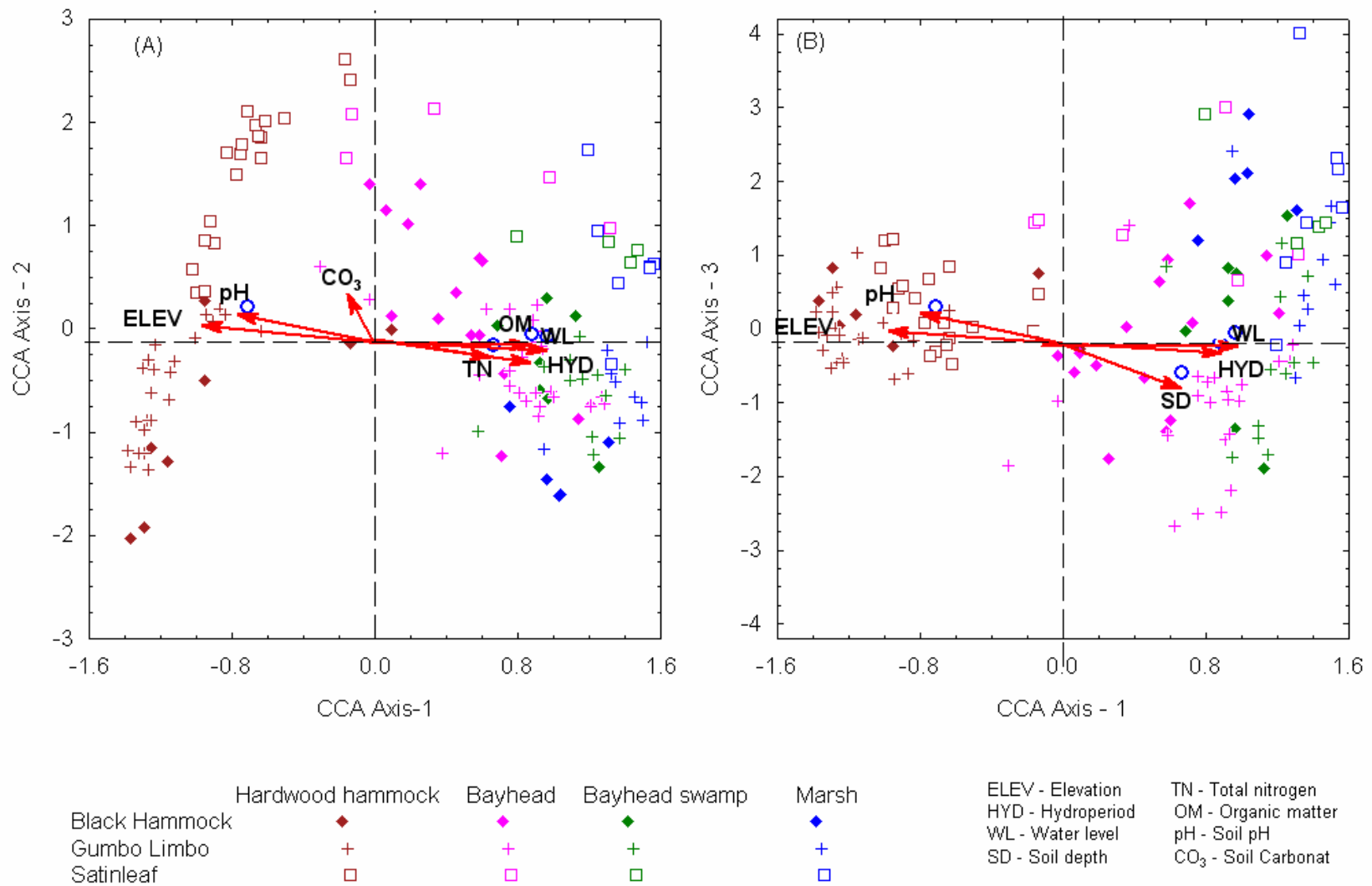


Figure 6-26. Bi-plots of (A) Axis-1 vs Axis-2 and (B) Axis-1 vs Axis-3 scores from CCA analysis of species abundance and eight environmental variables recored at 138 sampling points along transects at three Shark Slough tree islands.

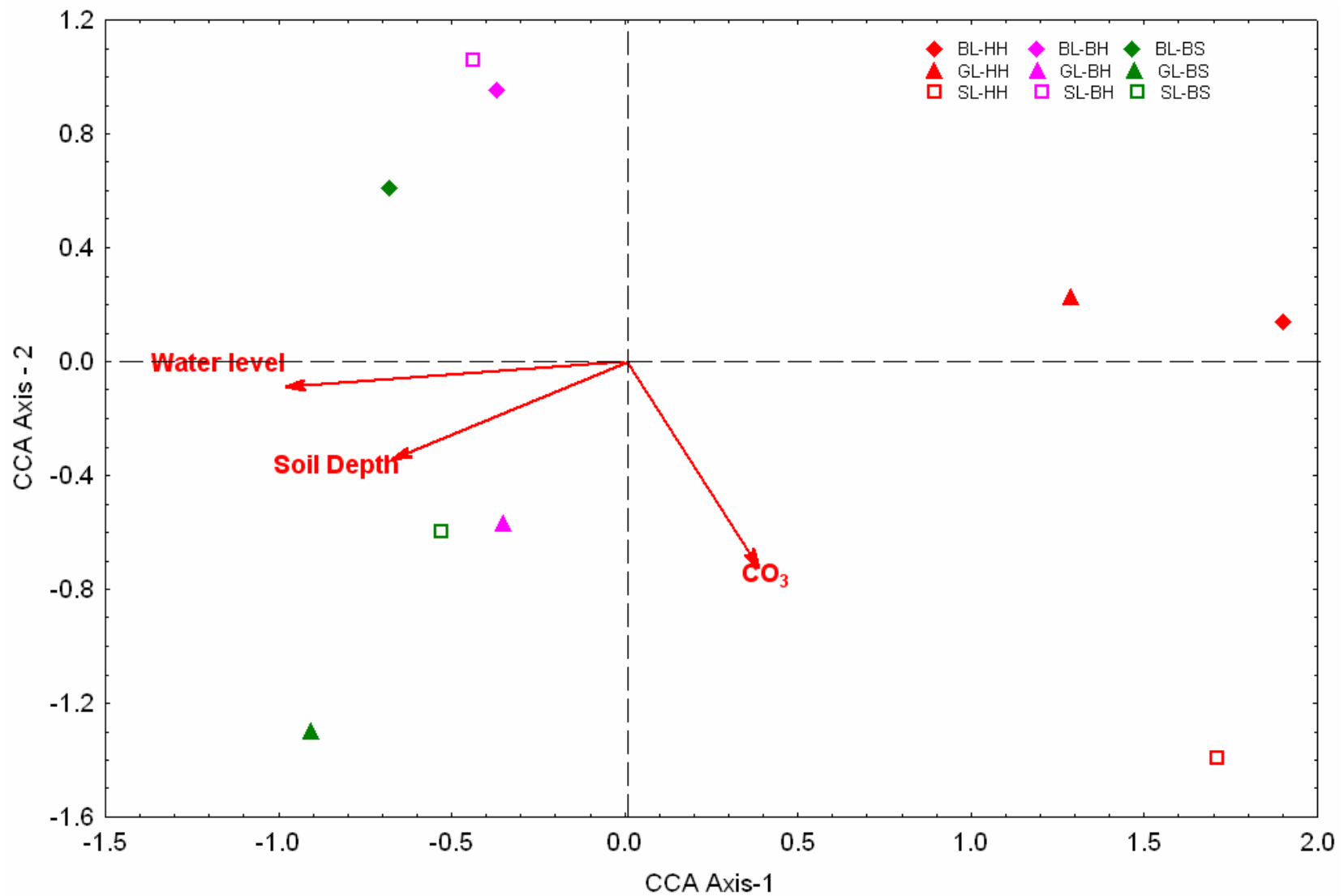


Figure 6-27. Bi-plots of scores of Axis-1 and Axis-2 from CCA analysis of species abundance data and three environmental variables measured within plots in the hardwood hammock (HH), bayhead (BH) and bayhead swamp (BS) forest communities at three Shark Slough tree islands. BL, Black Hammock; GL, Gumbo Limbo; SL, Satinleaf.

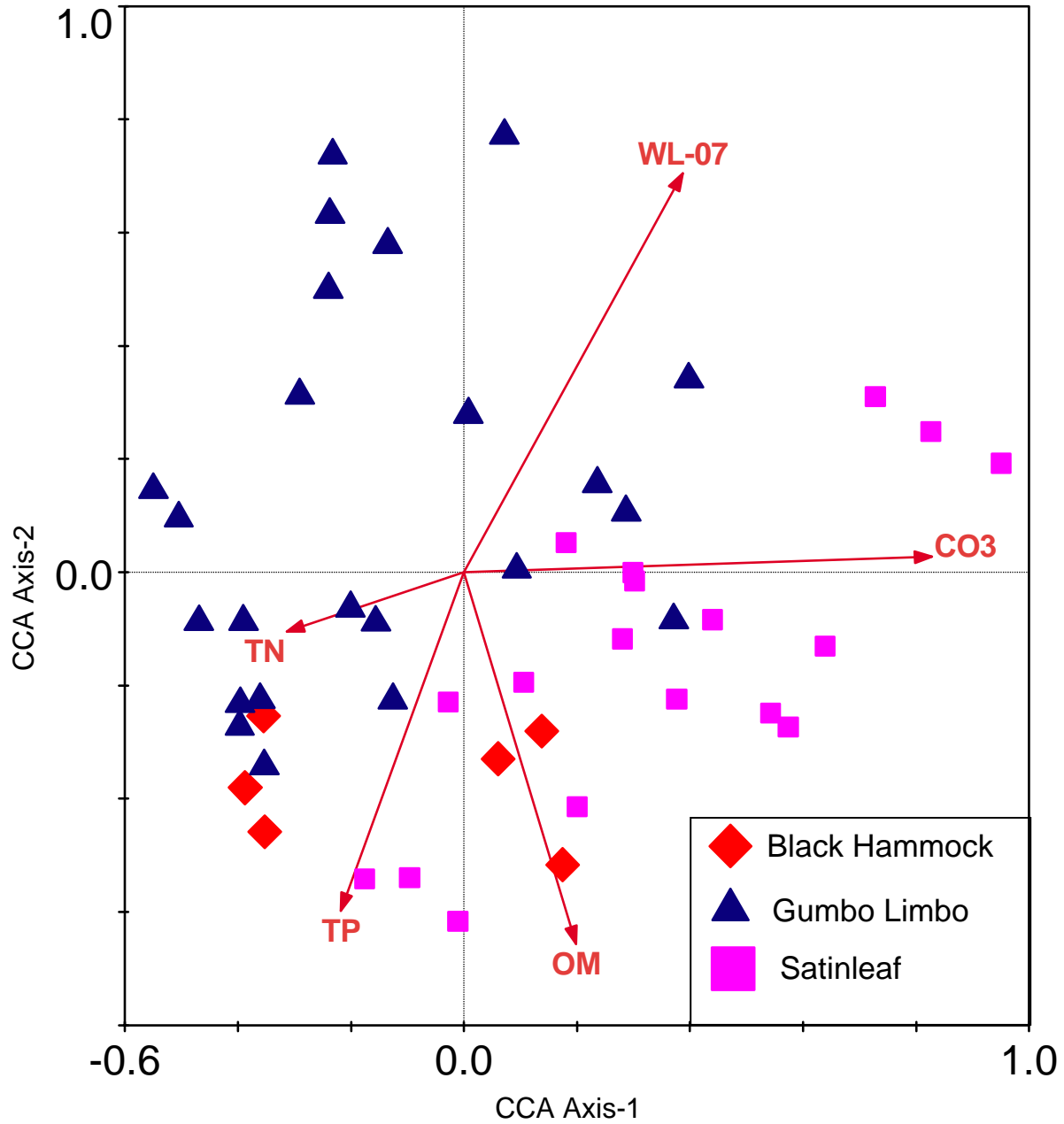


Figure 6-28. Bi-plots of scores of Axis-1 and Axis-2 from CCA analysis of species abundance data and five environmental variables measured along transects in the hardwood hammocks of three Shark Slough tree islands. CO3, Total Carbonate; OM, Organic Matter; TN, Total Nitrogen; TP, Total Phosphorus; WL-07, Water Level.

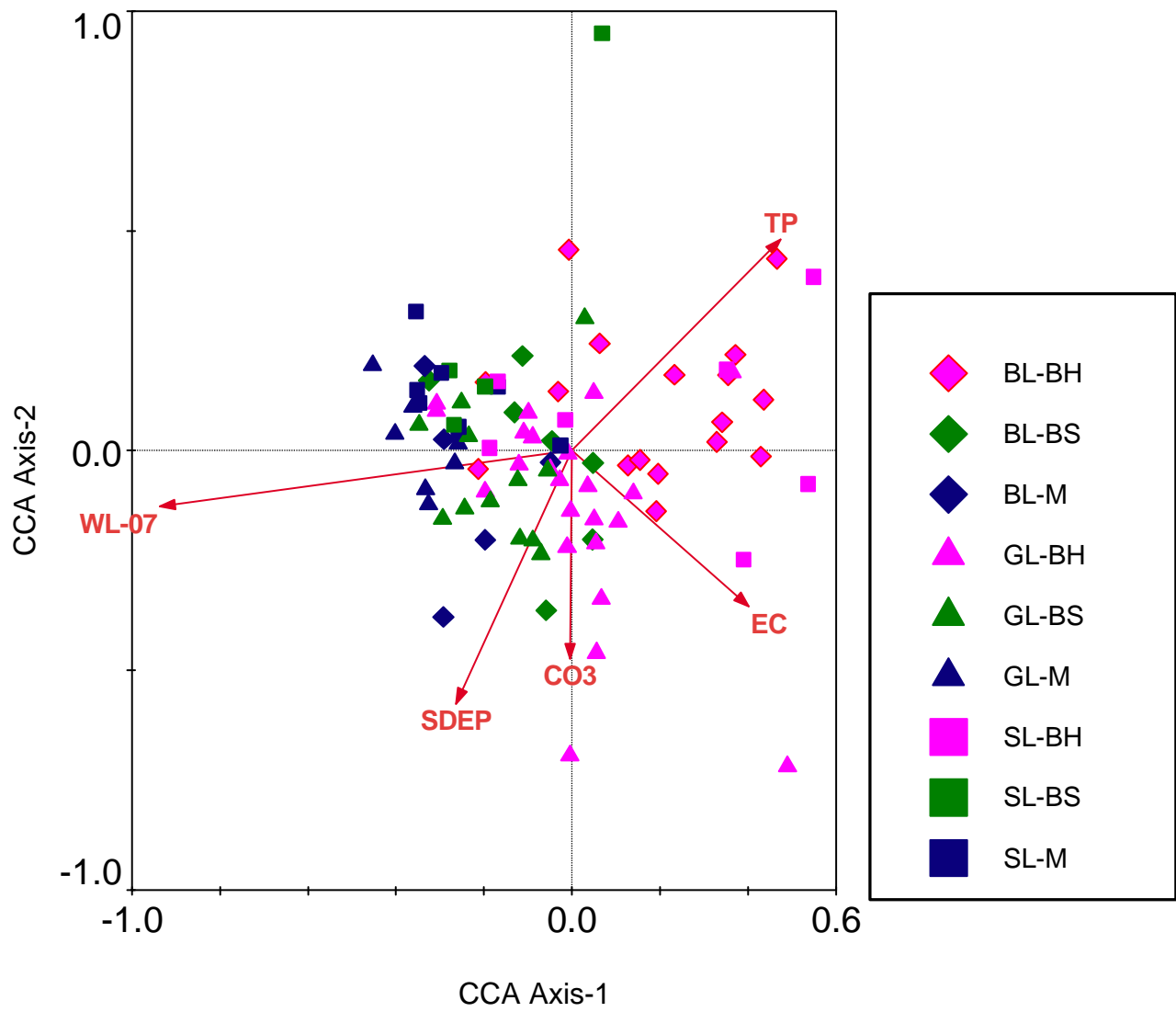


Figure 6-29. Bi-plots of scores of Axis-1 and Axis-2 from CCA analysis of species abundance data and five environmental variables measured along transects in the bayhead (BH), bayhead swamp (BS) and marsh (M) communities at three Shark Slough tree islands. WL-07, Water Level; SDEP, Soil Depth; CO3, Carbonate; EC, Electric Conductivity; TP, Total Phosphorus. BL, Black Hammock; GL, Gumbo Limbo; SL, Satinleaf.

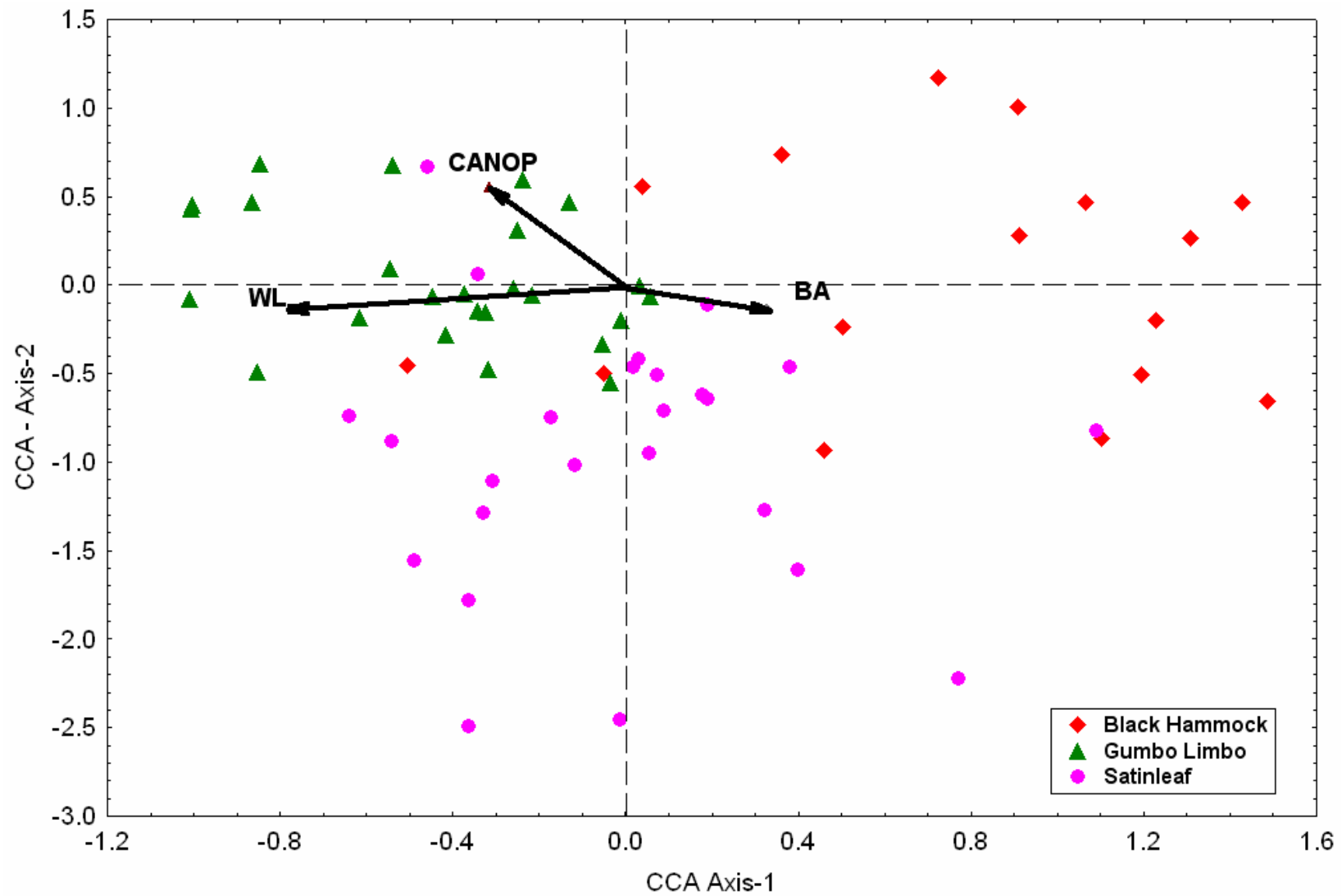


Figure 6-30. Bi-plots of scores of Axis-1 and Axis-2 from CCA analysis of herb layer abundance data and three environmental variables measured within plots of hardwood hammocks at three Shark Slough tree islands. BA, Basal area; WL, Water level; CANOP, Canopy openness.

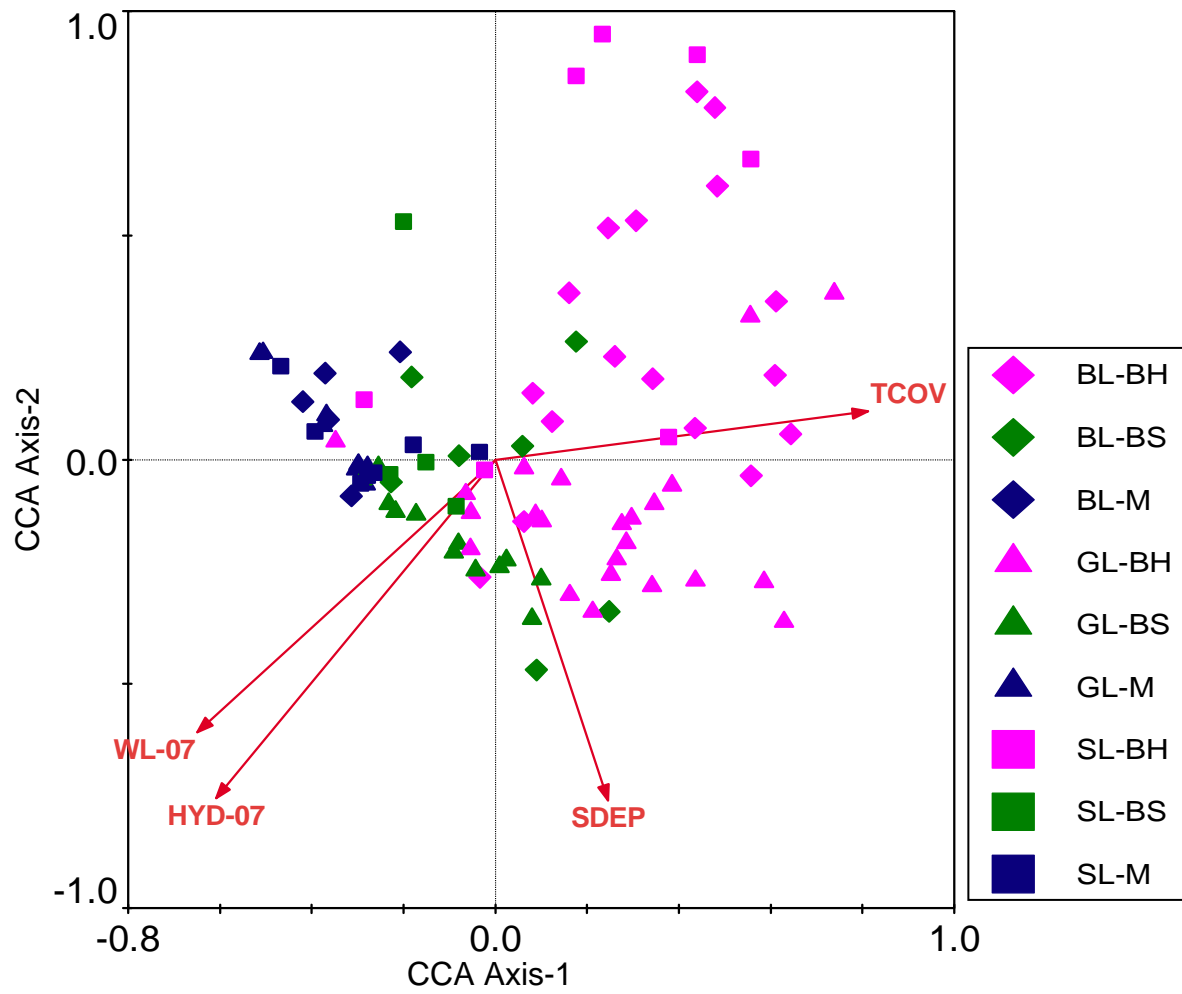


Figure 6-31. Bi-plots of scores of Axis-1 and Axis-2 from CCA analysis of herb layer abundance data and three environmental variables measured along transects in the bayhead (BH), bayhead swamp (BS) and marsh (M) communities of three Shark Slough tree islands. TCOV, Canopy Cover; HYD-07, Hydroperiod; WL-07, Water Level; SDEP, Soil Depth. BL, Black Hammock; GL, Gumbo Limbo; SL, Satinleaf.

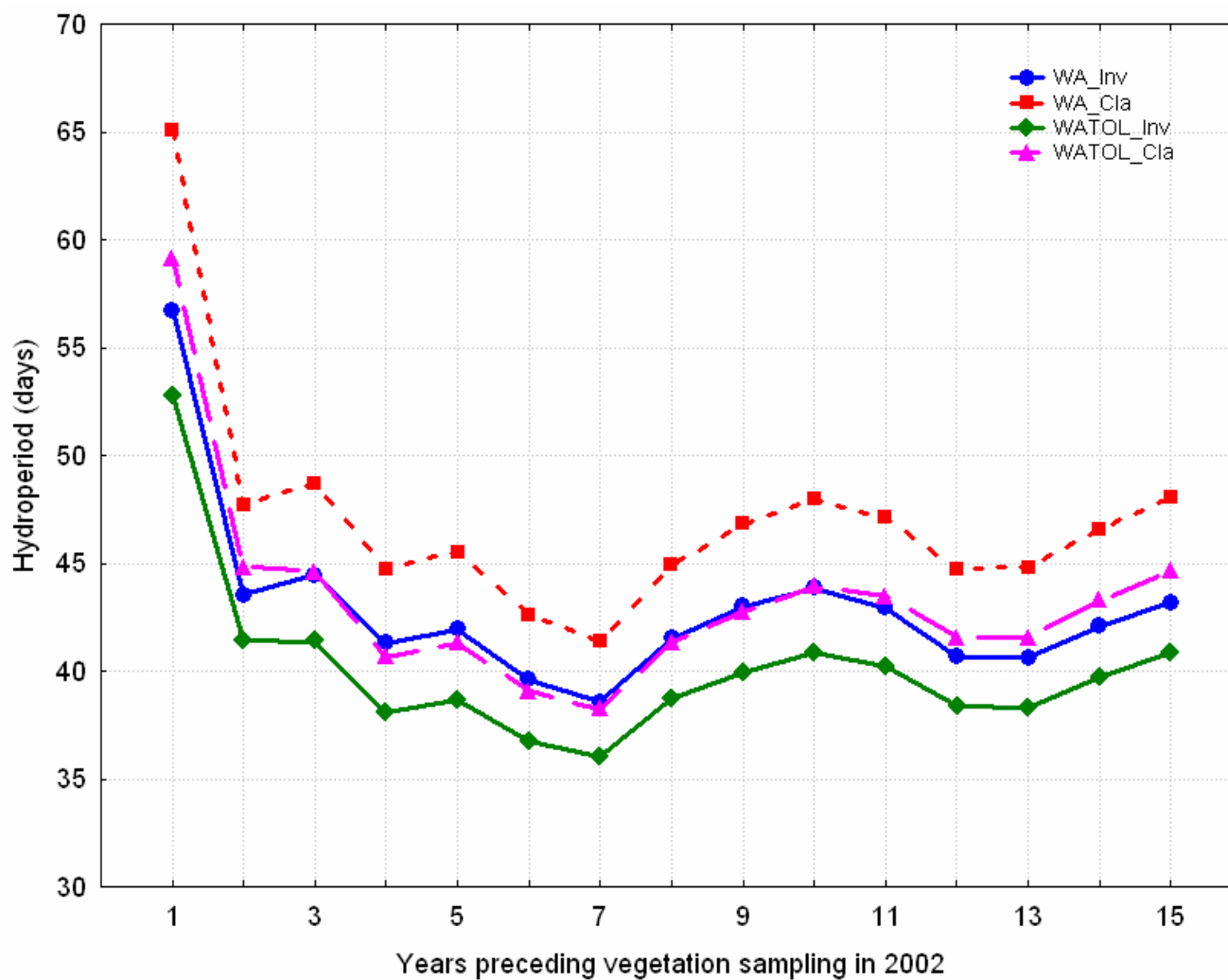


Figure 6-32. Root mean square error for prediction (RMSEP) from four different types of weighted averaging (WA) regression models developed for species data and hydroperiods. Mean hydroperiod was calculated by averaging annual hydroperiod for different periods preceding vegetation sampling. Inv, Inverse deshrinking; Cla, Classical deshrinking; TOL, Tolerance weighted.



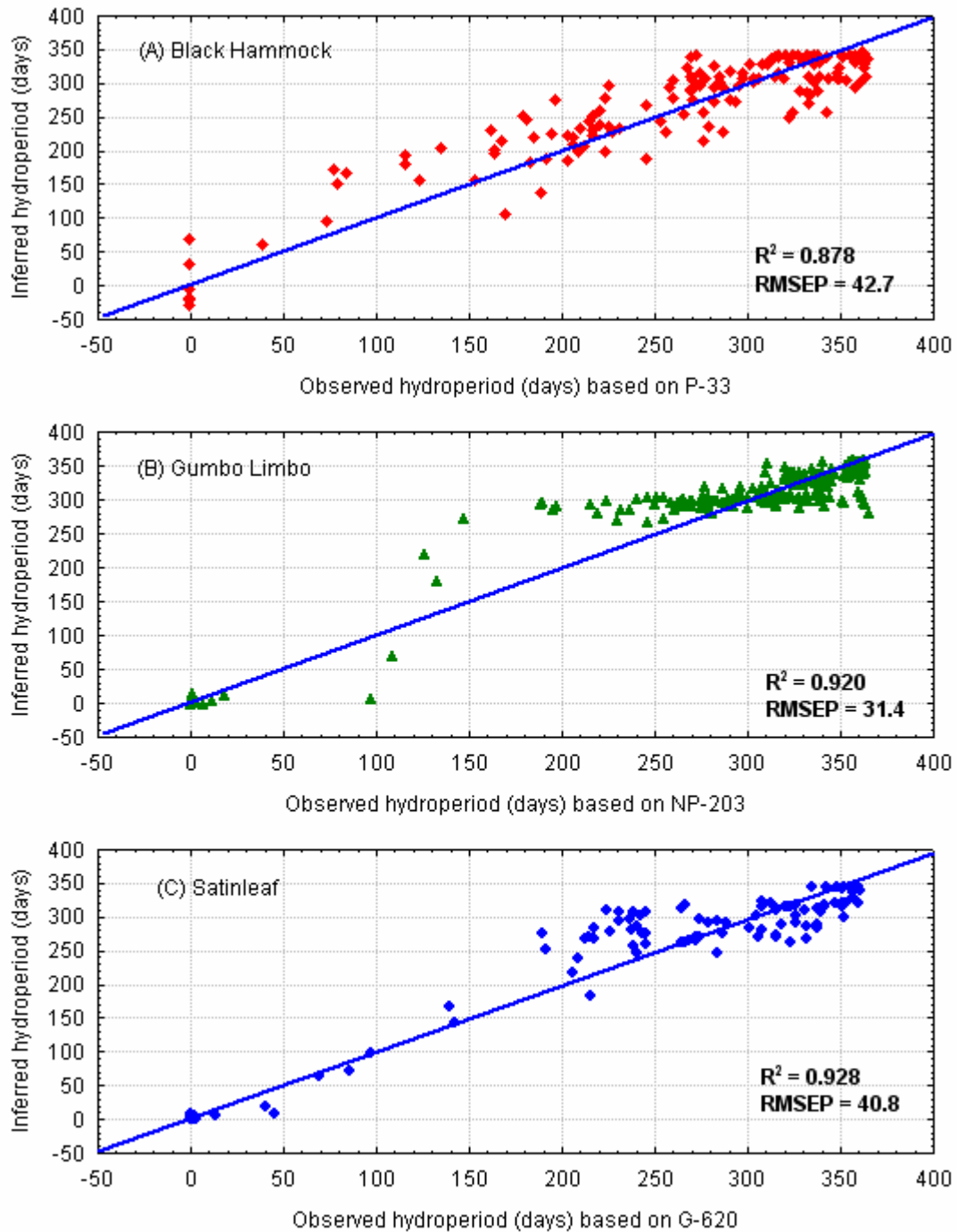


Figure 6-33. Observed vs inferred hydroperiods at sampling points along four transects on each of three Shark Slough tree islands. Inferred hydroperiods are derived from a tolerance weighted WA regression model.

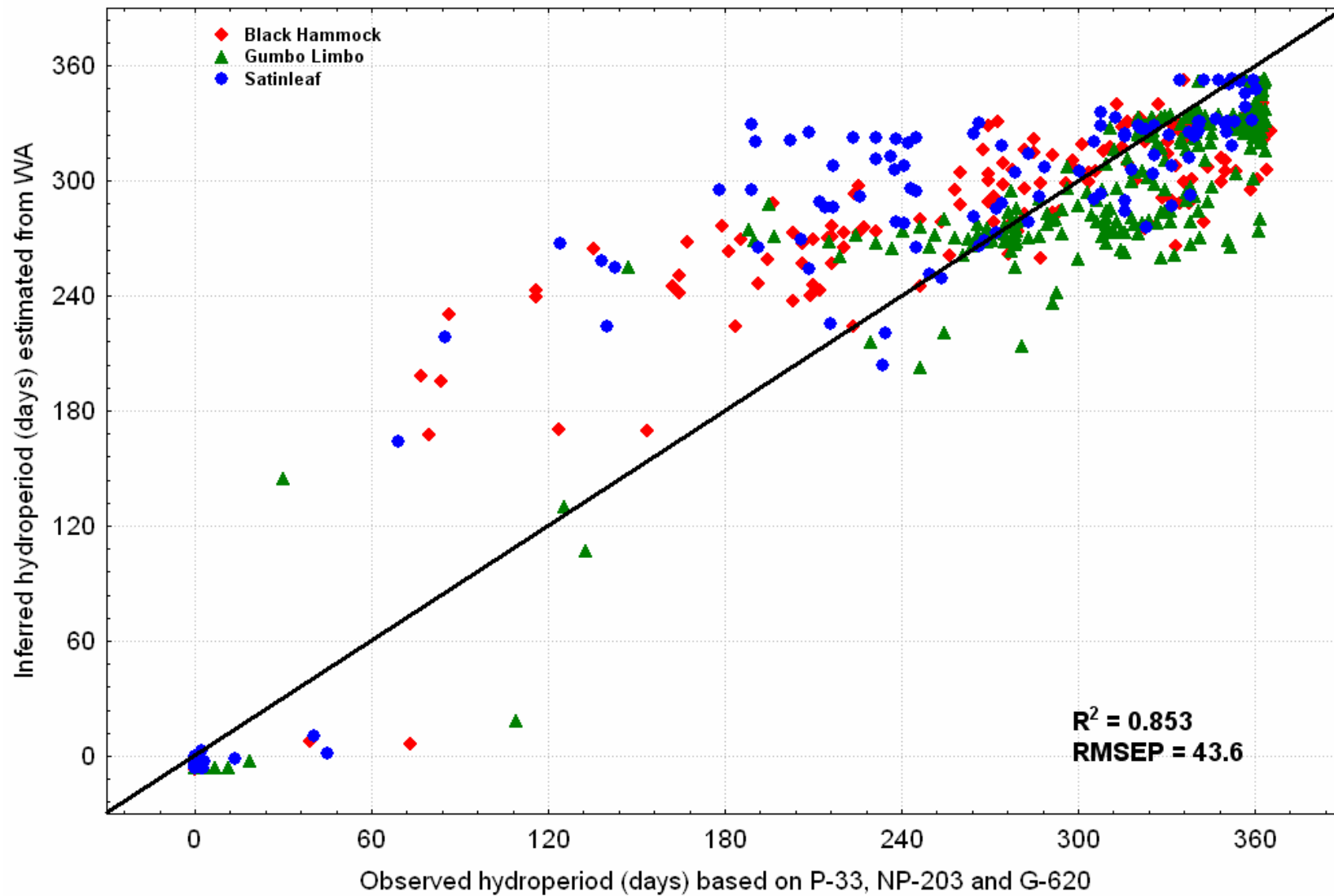
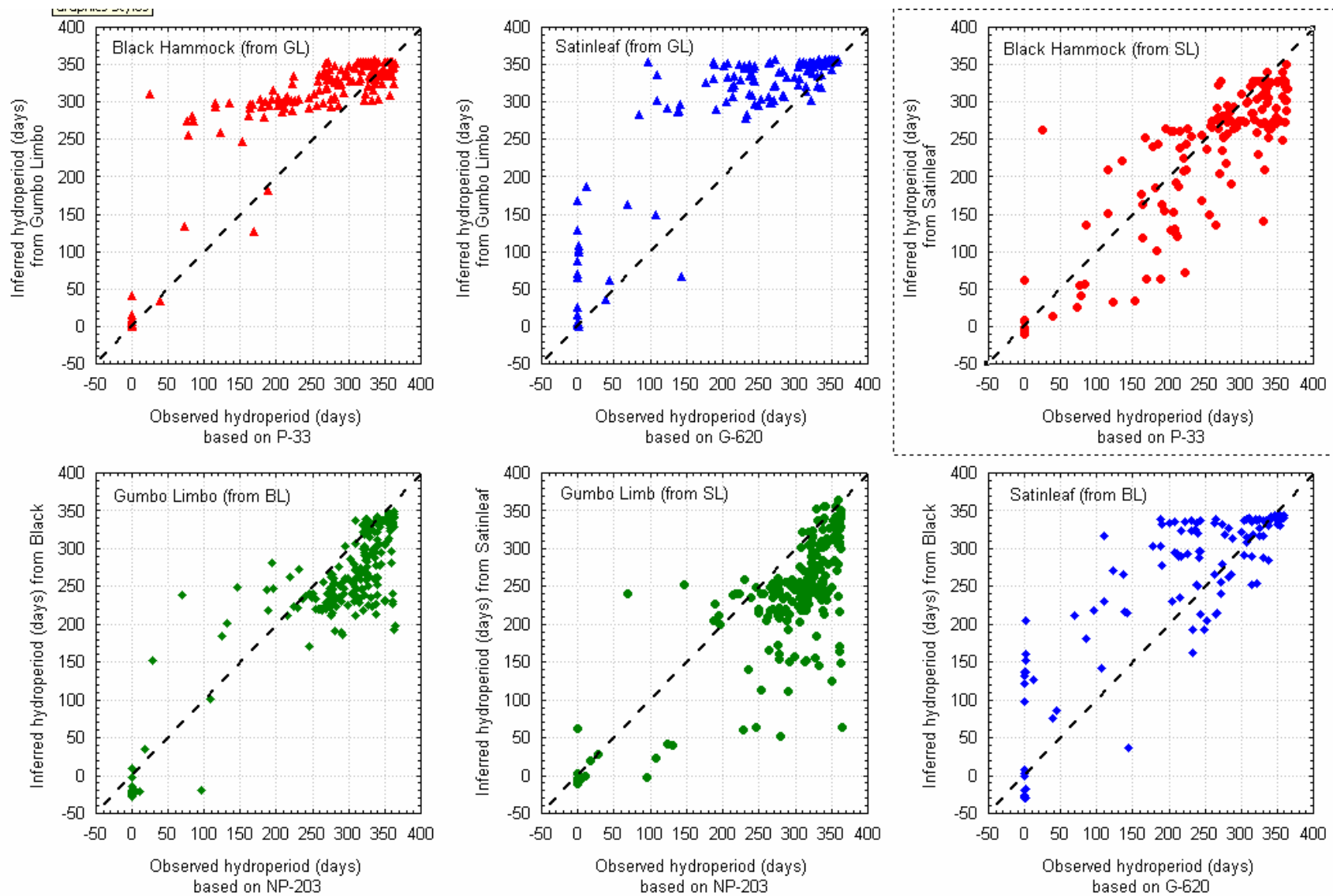


Figure 6-34. Observed vs inferred hydroperiods at sampling points along transects on three Shark Slough tree islands. Inferred hydroperiods are derived from a tolerance weighted WA regression model.



**Figure 6-35.** Observed vs inferred hydroperiods at sampling locations along four transects on each of three tree islands. Inferred values for locations on an island (calibration data set) are derived from a WA regression model developed from one of two other islands (training data set).

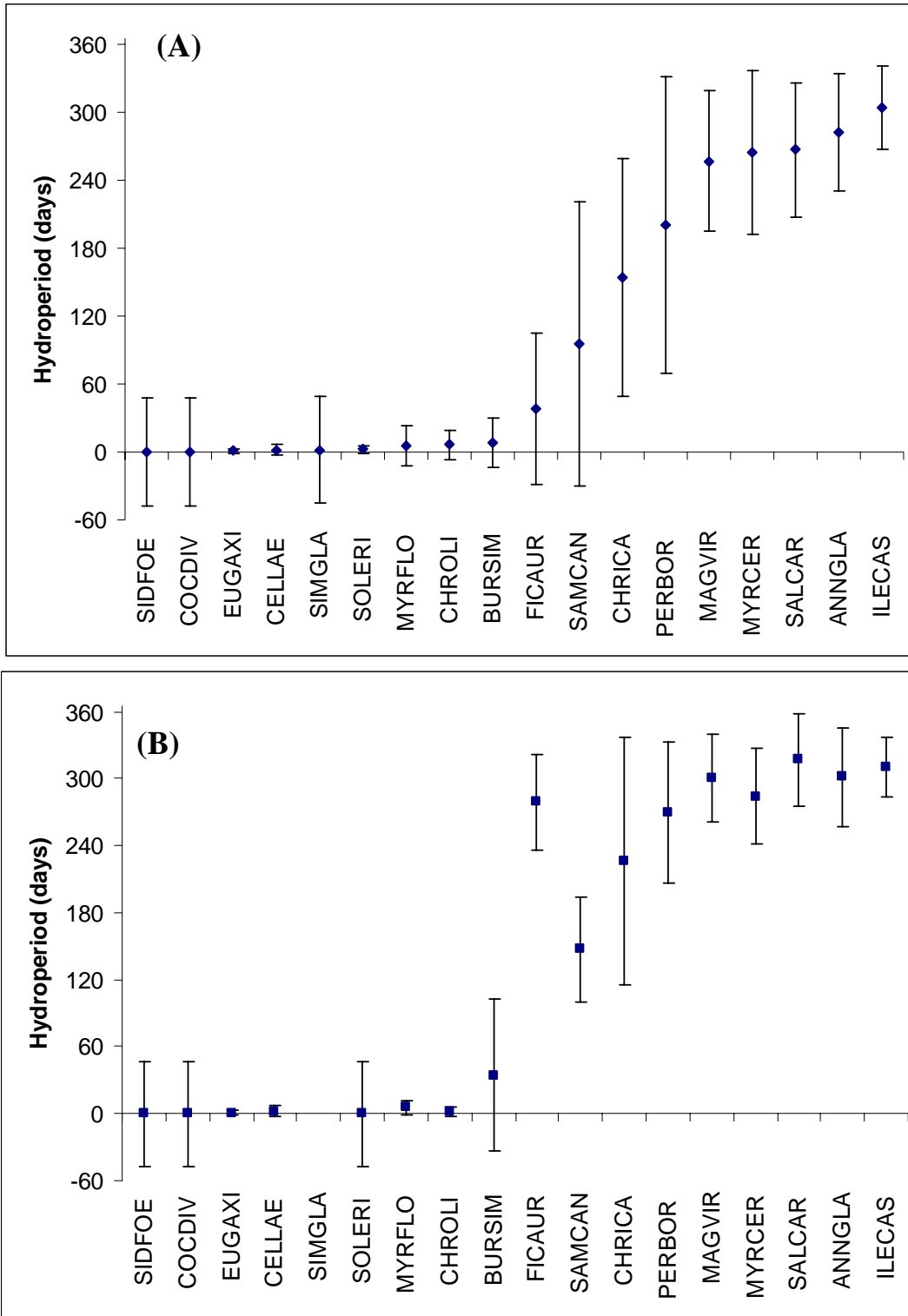


Figure 6-36. Mean hydroperiod optima and tolerances for (A) trees and (B) seedlings occurring in three Shark Slough tree islands. See Appendix 6-1 for species codes.

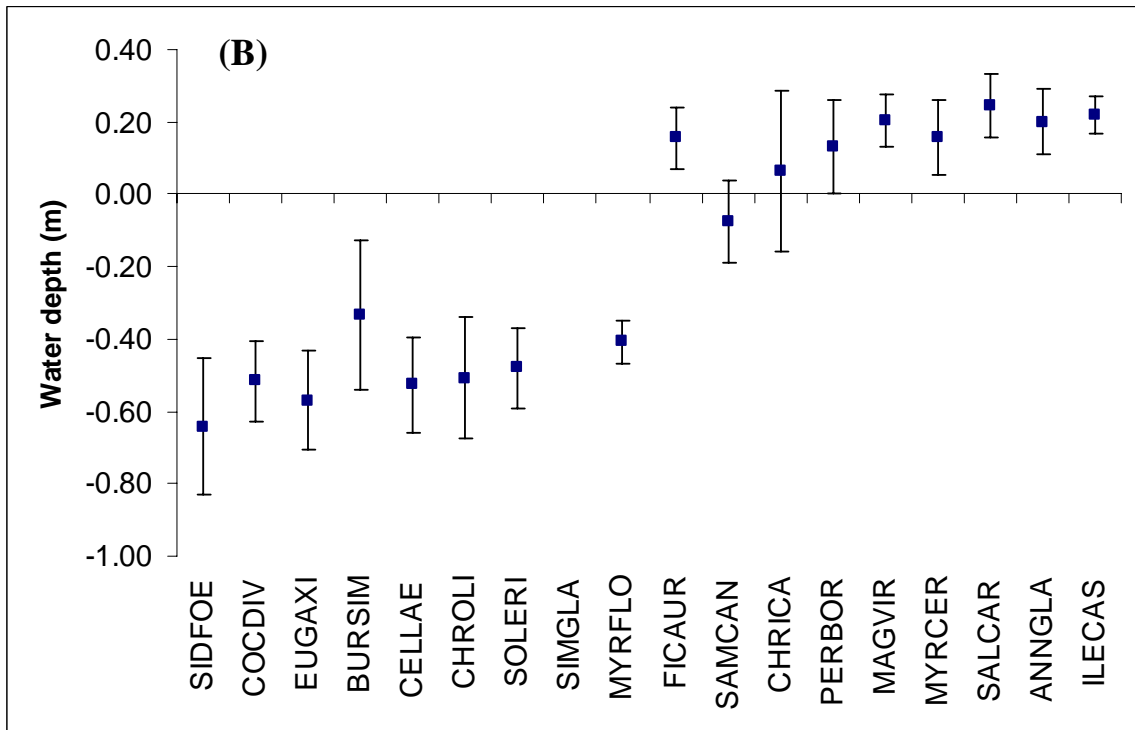
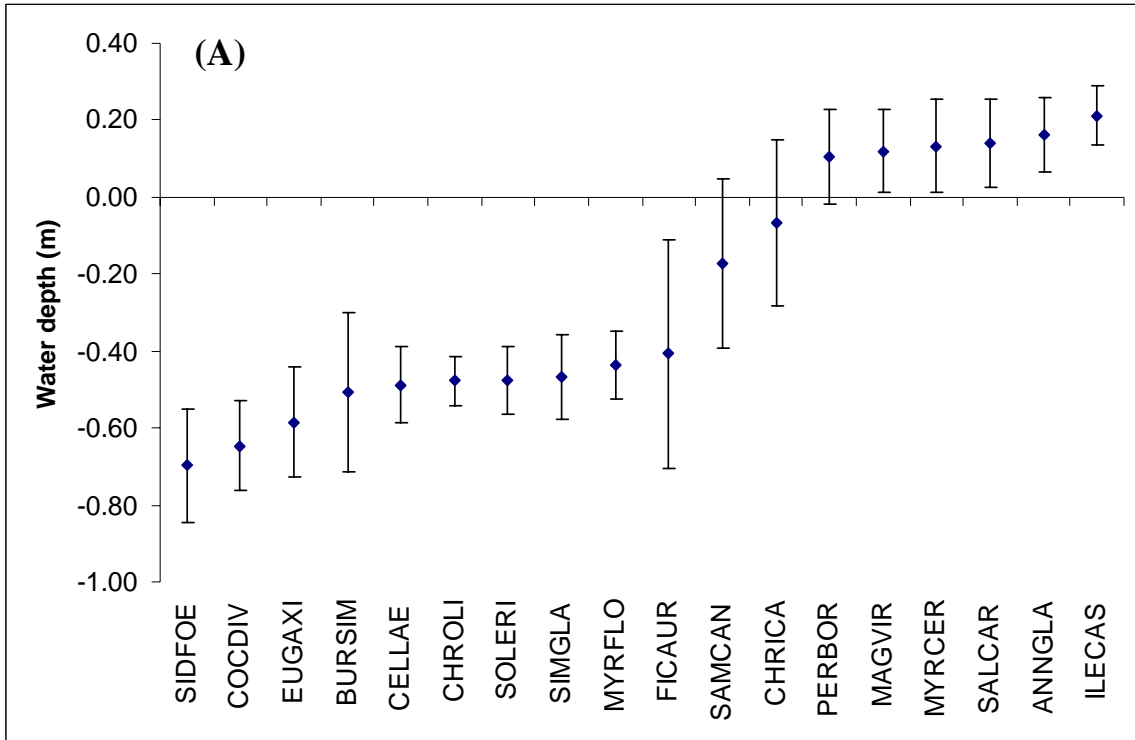


Figure 6-37. Mean water depth optima and tolerances for (A) trees and (B) seedlings occurring in three Shark Slough tree islands. See Appendix 6-1 for species codes.