



Figure 4. Procrustean superimposition plots generated from the ordinal results of morphology- and molecular-based nMDS for **(a)** species- and **(b)** genus-level data. Analyses were run for each approach based on the Jaccard coefficient. Blue circles represent scores from molecular-based samples and the end of the arrows the morphology-based assemblages. The distance between the two is the Procrustean residual. Samples with residual values greater than ca. the 50th percentile are marked with red arrows. **(c, d, e, f)** nMDS plots of epiphytic diatom compositional variation for **(c, e)** morphology- and **(d, f)** molecular-based data at different taxonomic resolutions (here, **(c, d)** species- and **(e, f)** genus-level resolutions). Inset are only the taxa with the highest axes (nMDS 1, nMDS 2) scores (here, score values greater than ca. the 90th percentile). Ampind, *Amphora indistincta*; Asteri, *Asterionella*; Attsep, *Attheya septentrionalis*; Berkhya, *Berkeleya hyalina*; Cocped, *Cocconeis pediculus*; Cyclosinv, *Cyclostephanos invisitatus*; Cymbonavi, *Cymboplectura naviculiformis*; Cymbop, *Cymboplectura*; Cymbsubh, *Cymbella subhelvetica*; Diad, *Diadema* Diatom, *Diatoma*; Euarc, *Eunotia arcus*; Eucocc, *Eucoconeis*; Frarad, *Fragilaria radians*; Gompgra, *Gomphonema gracile*; Gompmin, *Gomphonema minusculum*; Gompoli, *Gomphonella olivacea*; Gyro, *Gyrosigma* Halsub, *Halamphora subtropica*; Haspse, *Haslea pseudostrearia*; Hyalod, *Hyalodiscus*; Lemhung, *Lemnicola hungarica*; Lemn, *Lemnicola*; Leptoc, *Leptocylindrus*; Lucan, *Lucanicum*; Lutgoe, *Luticola goeppertiana*; Navant, *Navicula antonii*; Navcap, *Navicula capitatoradiata*; Navnoth, *Navicula nota*; Navsoeh, *Navicula soehrensii*; Navven, *Navicula veneta*; Nitamp, *Nitzschia amphibia*; Nitfrus, *Nitzschia fruticosa*; Nitinc, *Nitzschia inconspicua*; Nitsup, *Nitzschia supralitorea*; Pinacr, *Pinnularia acrosphaeria*; Pinmar, *Pinnularia marchica*; Plvic, *Planothidium victori*; Psamthi, *Psammothidium*; Pseudi, *Pseudictyota*; Rhizos, *Rhizosolenia*; Roundi, *Roundia*; Sellaph, *Sellaphora*; Stapho, *Stauroneis phoenicenteron*; Surfeb, *Surirella febigeri*; Tabafen, *Tabellaria fenestrata*; Thprof, *Thalassiosira profunda*.