



**WebFigure 3.** Origin assignment success rates. (a) Sensitivity and specificity analyses of each threshold value tested. TPR = true positive rate, TNR = true negative rate, PPV = positive predictive value, NPV = negative predictive value, and ACC = accuracy; %As represents the percentage of samples assigned to one of the two main spawning locations at 70%, 80%, or 90% assignment score thresholds. (b) For 70% and 90% assignment score thresholds, percentages of correctly or incorrectly assigned samples for reference samples captured in the Gulf of Mexico (GOM) and the Mediterranean (MED); purple, orange, and gray indicate Gulf of Mexico origin, Mediterranean origin, and unassigned samples, respectively. (c) For 70% and 90% assignment score thresholds, progression of the percentage of correctly or incorrectly assigned Gulf of Mexico (purple) and Mediterranean (orange) origin samples as the number of single nucleotide polymorphisms (SNPs) used increases. Vertical bars indicate standard deviation; circles indicate correct assignment rates for the most discriminant SNP subsets.