



Additional file 9 – Individual neighbor-joining dendrogram based on *DAS* distance among 241 samples representing local chickens from Ghana (n=112) and 5 commercial lines (n=129). red: Ghana; orange: BS-D; dark green: BS-C; dark blue: Bel-C; light green: Wel-A; light blue: BD-B; black star indicates individuals with $q_i > 0.2$, for clusters specific to commercial lines (STRUCTURE analysis for K=6).