PHYLOGEOGRAPHY OF CHAFFINCH *FRINGILLA COELEBS* FROM TURKEY BASED ON MORPHOMETRICAL AND MITOCHONDRIAL DNA

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Abstract— We studied the phylogeographic structure of Chaffinch (Fringilla coelebs) by capturing 100 individuals using mist nets in six different areas in Turkey during 2013–2015. To infer the phylogeographic structure of Chaffinch, we analyzed partial sequences of the mitochondrial cytochrome oxidase subunit I gene (COI; 655 bp) and morphometry from birds sampled. Fifteen different morphometric characters were measured. Although we did not find any significant differentiation between male's and female's body mass, the others measurements of female were found smaller than male except bill height at nostril ($p<0.05$). Morphometric measurements of male and female of Chaffinch was found different between northern; middle; southern populations (ANOVA; $p<0.05$) with lowest length of nostril to bill apex and length of bill apex to head back in southern populations and increase to the northern populations in both sex. A total of 25 COI haplotypes were found among 42 individuals revealing no distinct haplotype groups in Turkey. Population differentiations should be checked different gene too. This study was supported by TUBITAK (113O271).

Index Terms— Chaffinch, Fringilla coelebs, Phylogeography, Turkey