

## Unravelling the biogeography of secretive taxa by museum collections: the untold story of the black francolin (*Francolinus francolinus*, Phasianidae) in the Mediterranean

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The black francolin (*Francolinus francolinus*) (BF) comprises six morphological subspecies distributed from Cyprus and Turkey across Asia to India. In spite of being renowned as courtly gamebird since the Classic Age, this species suffers from paucity of demographic and molecular studies. In order to update the BF biogeographic pattern by pursuing a thorough sampling across the unsafe and remote areas representing most of the specie's range, tissues from museum specimens (76, XVIII<sup>th</sup> c.-1954) hosted in US and European ornithological collections were genotyped at a 185 bp-long fragment of the mtDNA Control Region gene along with modern birds (205) sequenced at the entire gene. The access to ornithological collections opened the unforeseen opportunity to elucidate the genetic affinity of the extinct populations once residing in the western Mediterranean (Italy, Spain), thus settling the debate about autochthony versus allochthony in that region. Three well-defined haplogroups - each one including a pair of morphological subspecies and matching the phylogeographical pattern inferred with the whole gene - were found to reflect a westward adaptive radiation, a more complex scenario being nonetheless disclosed in the Indian sub-continent. The nonnative status of the western Mediterranean BFs was ultimately assessed, a tight genetic affinity with conspecifics from Cyprus and southern Asia being found. This finding, which partly confirmed the invoked importation during the Crusades, pointed to the major human impact on Mediterranean biodiversity through long-distance trade across Asia to satisfy the high demand for exotic species by the European aristocracy during the Medieval times and the Renaissance.