

The first study of Parasitic feather mites (Acari: Acariformes) on some common birds of Pakistan, with an association of Keratinophilic fungus in vitro growth.

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Birds' feathers are a rich source of keratin found in the ecosystem and can be considered an important source for the growth of fungi feeding on keratin. The fungus on feathers is grown abundantly on most terrestrial birds and causes serious damage to the feathers hence affecting flight, preening can damage the barbs and barbules. In the present study, it was observed for the first time that a bird carries a high burden of ectoparasites mainly including mites and fungus on them. The study was designed to explore the variety of parasitic feather mites, also their interaction with the keratinophilic fungus. For this purpose, the mites from the common bird's species were collected and identified as *Falculifer rostratus* Buchholz, 1869, *Hyperaspidacarus tridentatus* Atyo and Smith, 1983, *Freyana anatine* (Koch, 1844), *Freyana ferinae* sp.n., *Trouessartia corvine* (Koch, 1940), *Proctophylloides turdoides* sp.n., *Pterolichus francolinae* sp.n., *Bychovskiata subcharaderii* Dubinin, 1951 and a species of the genus *Avenzoara* sp. were collected from *Columba livia*, *Streptopelia segalensis*, *Anas platyrhynchos*, *Anas crecca*, *Aythya ferina*, *Corvus splendens*, *Turdoides striatus*, *Francolinus pondicerianus*, *Tringa glareola*, *Himantopus himantopus* and *Egretta garzetta* from various parts of the province of Sindh during 2021-2022. The keratinophilic fungus was grown in SDA medium under standard laboratory protocols on some common bird's feathers and four genera of fungi were identified as *Alternaria* sp., *Paeceliomyces* sp., *Microsporum* sp., *Trichophyton* sp. and *Aspergillus niger* Michelli, 1729 were reported for the first time from Pakistan.