

of Falcolipeurus to date have been recorded in North America from hosts of the Cathartidae, Accipitridae (Rostrhamus, Aquila, and Haliaeetus) and Falconidae (Caracara). Species within the genus Falcolipeurus are fairly host specific, but occurrence of a genus on hosts seems to be dependent upon host size since hosts of three families within the Falconiformes harbor these parasites.

Saemundssonina tringae (O. Fabricius, 1780) is a parasite found on the head and neck region of many small species of Charadriiformes. It has been recorded in North America from the host genera Arenaria, Calidris, Erolia, Limnodromus and Ereunetes. The list of hosts could probably be enlarged if collections were available from other small birds not listed.

Domestication of Host

The original host for Menopon gallinae (Linnaeus, 1758) apparently was the wild chicken. The original host for Menacanthus stramineus (Nitzsch, 1818) apparently was the wild turkey. Since domestication of these two hosts, both species of Mallophaga can be found on any gallinaceous host raised in association with barnyard flocks. In some cases the two parasites may occur in limited numbers on domestic ducks and geese. Also in some regions of the world these parasites are now established on many species of wild gallinaceous hosts.

A similar situation probably exists with the parasite Colpocephalum turbinatum Denny, 1842. This parasite, originally described from pigeons, can be found on kites, hawks and eagles, where it is now established.

Host Color

Species of Ardeicola, found on the primaries of hosts of the order Ciconiiformes, appear to be host specific, with one exception: Recently it has been found that Ardeicola ~~galbagla Ansari, 1947~~, a ^{expallidus Blagoveshtchensky, 1940} parasite first found on the Cattle Egret, Bubulcus ibis, is also found on the Common Egret, Casmerodius albus; the Little Egret, Egretta garzetta; and the Snowy Egret, Leucophoyx thula. The only criteria for this distribution apparently is the white color of related hosts.

Host Genus

A number of species of Mallophaga are restricted to a single host genus rather than a single species of host. Examples are: Trinoton aculeatum Piaget, 1885, a large body louse found on Tree Ducks of the genus Dendrocygna; and Laemobothrion tinnunculi (Linnaeus, 1758), a large body louse found on hosts of the genus Falco (Gyrfalcon, Falcon, Kestrel and Sparrow Hawk).

Host of Related Genera

Birds of more than one genus, which obviously are closely related, may share a common parasite. Ciconiphilus cygni Price and Beer, 1965, a small body louse, is found on the Swans (Mute, Whooper, Whistling and Trumpeter). Ciconiphilus pectiniventris (Harrison, 1916) is found on Brants and Geese of the genera Branta, Philacte, Anser and Chen. In these two examples, host relationships above the generic level are evidenced by the lice they harbor.

Host Family

Many genera of lice are restricted to hosts of only one family. However, only a few species are presently known to be widely distributed on hosts of a family. In addition to the examples already cited, three others will further illustrate this situation.

Ciconiphilus decimfasciatus (Boisduval and Lacordaire, 1835) is a small body louse found on Herons, Egrets and Bitterns of the genera Ardea, Florida, Bubulcus, Dichromanassa, Casmerodius, Leucophoyx, Egretta, Hydranassa, Nycticorax, Nyctanassa and Botaurus of the family Ardeidae.

Laemobothrion glutinans Nitzsch, 1861, is a large body louse found on the Turkey Vulture, the Black Vulture and the California Condor of the family Cathartidae.

Brueelia straminea (Donny, 1842) is a wing shaft louse found on Flickers, Sapsuckers and Woodpeckers of the genera Colaptes, Centurus, Melanerpes, Asyndesmus, Sphyrapicus and Dendrocopos of the family Picidae.

Again, in each example given the relationship exhibited by a grouping of hosts into a family is confirmed by the lice.

Host Order

The number of species of Mallophaga that can be found on hosts of more than one family within an order is few. Ancistrona vagelli (J. C. Fabricius, 1787) is a large body louse found on some hosts of the order Procellariiformes. It has been found to date on hosts of the genera Daption, Fulmar, Puffinus, Pterodroma, Pelagodroma, and Oceanites of the families Procellariidae and Hydrobatiidae.

Ricinus marginatus (Children, 1836) is a large body louse found on some hosts of the order Passeriformes. It has been collected off hosts of the genera Platypsaris, Tyrannus, Muscivora, Myiarchus, Sayornis, Empidonax, Contopus and Pyrocephalus of the families Cotingidae and Tyrannidae.

As mentioned above, some species of lice may occur on hosts of more than one family in the Galliformes.

Summary

Fourteen species representing ten genera of Mallophaga are known from the Guinea Fowl. Fewer genera, usually four or five, are known from most species of hosts. Many Mallophaga are believed to be host specific; the remainder exhibit varying degrees of host specificity. As more data become available on the distribution of Mallophaga, it is apparent that it will also assist in developing a better understanding of the relationships of the hosts. A better analysis will be possible because within Mallophaga host specificity varies from subspecies to broad groupings depending upon the species or genus of Mallophaga involved. When considering all the forms of Mallophaga found on a group of related hosts, a number of views at different levels in the relationship can be examined.

It is hoped that, in addition to presenting a case for how Mallophaga may assist in ornithological studies, the case is also made that not all species of lice are as host specific as often stated by entomologists who are not serious students of Mallophaga.