

Genus: *Haemoproteus*

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This genus has many species found in bird and some lizard and turtle. Organisms are transmitted by blood sucking insect i.e. Hippoboscid flies and in some cases , by the member of the genus *Culicoides*. Gametocytes occur in the erythrocyte and posses a halter-shaped appearance encircling the nucleus. Pigment granules also occur. Schizogony occurs in the endothelial cells of the blood vessel of inner organs, especially in the lung. (Developmental cycle is similar with *Plasmodium*, see in *Plasmodium*).

Haemoproteus canachites: in spruce grouse

H.columbae: in domestic and wild pigeon, doves

H.danilewskii: in hooded crow and other birds

H.lophortyx: in quail

H.meleagridis:in domestic and wild turkey

H.nettionis:in duck and goose

H.sacharovi:in pigeon and dove

***Haemoproteus columbae*:**

Occur in domestic and wild pigeon, doves, member of wild bird. The only form which occurs in erythrocytes is –the gamont. Macrogamonts stained dark blue with Romanowsky stains, the nucleus is compact, staining dark purple to red, and pigment granules are displaced throughout the cytoplasm. Microgamate stain pale blue to pinkish, the nucleus is pale pink and diffuse, and pigment granules are collected into spherical mass.

The only proven vector for this protozoa is *Pseudolynchia canariensis*.

Pathogenesis:

Pathogenicity is generally low, adult birds usually show no evidence of disease. However, acute form of infection is reported from pigeon nestling, with heavy mortality recorded. Clinical signs are anorexia and anaemia. On post mortem , liver and spleen are enlarged and dark in colour.

Diagnosis:

Examination of blood smear and demonastration of gamont and schizont
Quinacrine drug is effective.

Gamont of *H.columbae*

