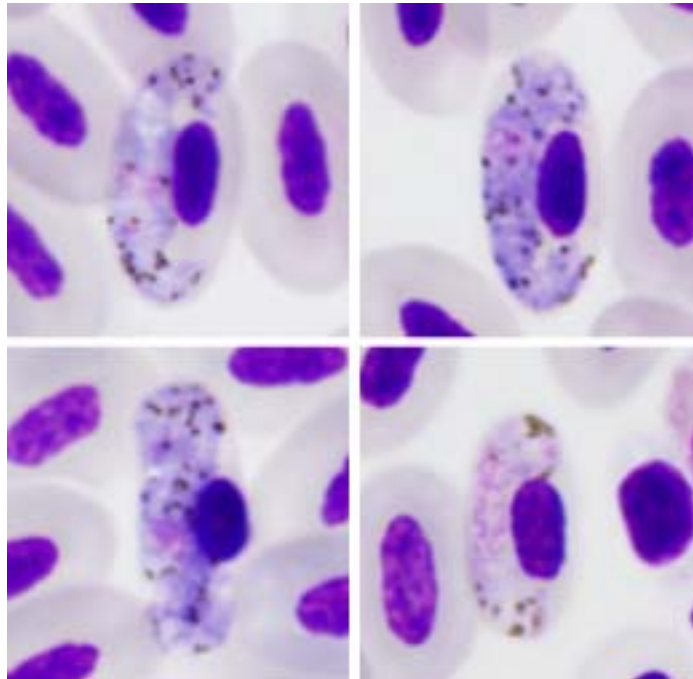


*Haemoproteus (Haemoproteus) paramultipigmentatus* Valkiūnas, Iezhova, Evans, Carlson,

Martínes-Gómez, Sehgal, 2013

**Typical blood stages:**



**Important diagnostic characters of blood stages:**

A parasite of species of the Columbiformes which growing gametocytes, with length exceeding length of erythrocyte nuclei, have no permanent position in relation to nuclei or envelope of erythrocytes; sometimes lying free in cytoplasm, not touching either nuclei or envelope of erythrocytes; also seen touching nucleus or envelope of erythrocytes, but usually not both these cellular structures at this stage of development. Cytoplasm blue, homogeneous in appearance, volutin granules not seen. Fully-grown gametocytes closely associated with nuclei and envelope of erythrocytes, filling erythrocytes up to their poles. Pigment granules of small size ( $< 0.5 \mu\text{m}$ ), roundish, black, numerous, randomly scattered throughout cytoplasm. Fully-grown gametocytes are halteridial, they markedly displace nuclei of erythrocytes laterally.

**Mitochondrial cytochrome b sequences:**

COLPAS03, COLPAS05

**Avian hosts and distribution:**

Type avian host – *Columbina passerina socorroensis*.

*Haemoproteus multipigmentatus* was recorded in Socorro Islands.