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Alphitobius diaperinus

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This dark brown-blackish beetle, which reaches a length of 4.5 mm up to 7 mm, has its origin in tropical regions of East Africa. However, due to ongoing globalization this species is now found worldwide everywhere in grain storage system and in many of the huge rearing facilities of chickens, turkeys, goats, etc. Due to this living within bird food, this species became a vector of a broad spectrum of agents of diseases of farmed birds.

- (a) Viruses:
- Virus of bursitis, virus of Newcastle disease (ND), virus of infectious bronchitis (IB), corona virus of poultry enteritis, etc.
- (b) Bacteria:
- *Salmonella* species, *Campylobacter* spp., *Escherichia coli*, *Staphylococcus aureus*, and strains of *Streptococcus* sp.

(c) Parasites:

- Cestodes (like *Hymenolepis minutissima*, *Choanotaenia infundibulum*, *Raillietina* sp., *Cotugnia* sp.)
- Protozoa (like *Eimeria* species).

Except for tapeworms, where these beetles act as true intermediate hosts, most of the above cited agents of diseases are transmitted mechanically. However, since these beetles occur often in extreme numbers in stored bird food, they must be considered as very important vectors of agents of diseases.

Further Reading

- Enigk K, Sticinsky E (1959) Die Zwischenwirte von *Choanotaenia infundibulum* und *Hymenolepis carioca*. *Parasitol Res* 19:278–308
- Jacobs-Reitsma WF et al (1995) Epidemiology of *Campylobacter* spp. at two Dutch broiler farms. *Epidemiol Infect* 114:413–421
- John HJ et al (2011) Investigation of the efficacy of synthetic silicones on *Alphitobius diaperinus* beetles. Dissertation, University of Leipzig, pp 1–110