

Pest Profile

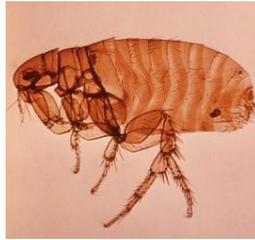


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Common Name: Oriental Rat Flea

Scientific Name: *Xenopsylla cheopis* (Rothschild)

Order and Family: Siphonaptera: Pulicidae

Size and Appearance: The Oriental rat flea is about 2.0- 2.5 mm in length with a dorsally flattened, wingless, red to brown colored body. It features very well developed palps and piercing sucking mouthparts for blood feeding. When the flea has taken a blood meal, abdomen will be bright red. They have compound eyes and spines visible on all 6 legs. Larvae are white, slender, and have no eyes or legs. The Oriental rat flea larva is quite similar in appearance to the cat or dog flea.

	Length (mm)	Appearance
Egg	< 0.05 mm	Eggs are oval and white in color. Females lay 4-8 eggs after each blood meal.
Larva/Nymph	< 0.5-3 mm depending on instar	White, slender, with no eyes or legs. 3 larval instars.
Adult	2.5 mm	Flattened, elongate bodies with red-brown color. All six legs feature spines. Well defined mouthparts.
Pupa (if applicable)	2.0 mm	Made of spun silk and is rendered immobile.

Type of feeder (Chewing, sucking, etc.): Piercing/sucking

Host /stored food products: *Xenopsylla cheopis* show preference towards the Norway rat (*Rattus norvegicus* (Berkenhout)) but have been found on the cotton rat, roof rat, rabbits, house mouse, and squirrels.

Description of Damage (larvae and adults): Oriental rat fleas serve as intermediate hosts for both typhus and bubonic plague through feeding on rats. They readily bite humans and can vector both diseases through this method. They are famous for vectoring the Plague in the middle ages.

References:

Smith, E.H. and Whitman, R.C. (2007). Blood Feeders- Oriental Rat Flea. In *NPMA Field Guide of Structural Pests*. (3.6.2). National Pest Management Association International.

H., Johnson, N., Borror and Delongs Introduction to the Study of Insects. Brooks/Cole, 7th Ed. 2005. Pg. 658-59.

Shetlar, D.J., Andon, J.E. (2011). Fleas. University of Ohio, Department of Entomology. Retrieved November 12th, 2016 from <http://entomology.osu.edu/schoolipm/IPMfiles/Factsheets/fleas.pdf>