Trends in Parasitology | Parasite of the Month

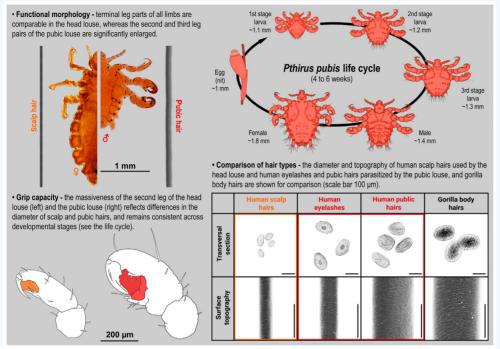
Pthirus pubis (pubic louse)

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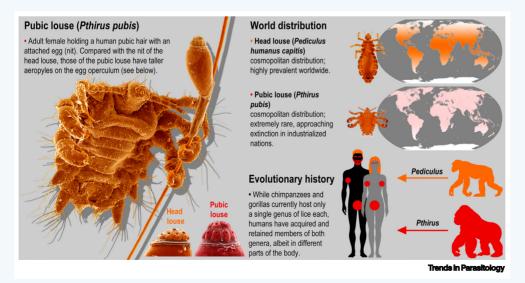
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The human pubic louse originated from a host switch from gorillas to humans ~3 million years ago. These permanent. blood-feeding ectoparasites use crab-like claws (hence crab louse) to grasp pubic and perianal hair, making transmission primarily dependent on close physical or sexual contact (hence papillon d'amour). Other body parts can also be infested, including legs, abdomen, chest, back, eyelashes, and, rarely, the scalp. Infestations occur year-round, with a slight increase in colder months. All three human lice species are highly host-specific and live exclusively on humans. Historically, prevalence ranged from 2% to 10% but has precipitously declined since the millennium. Social changes, particularly the 'deforestation' of their natural habits, are a major factor, as most sexually active adults now at least partially remove pubic hair. Case reports are increasingly rare, incidence is extremely low, and the pubic louse may be nearing extinction - particularly in affluent populations.



KEY FACTS:

Unlike the body louse, the pubic louse is not known to transmit any human disease.

Adults die within 48 h without a blood meal.

Females lay 20-30 eggs (nits) over a ~2-week lifespan; after ~1 week, nymphs hatch and mature through three instars into adults in 2-3 weeks.

Their sedentary lifestyle limits movement to a few centimeters per day.

The human pubic louse harbors a specific endosymbiont, Ca. Riesia pthiripubis.

DISEASE FACTS:

Most infestations are asymptomatic, but symptoms can include itching (pruritus), often leading to scratching. Phthiriasis pubis may cause reddish bumps, excoriations, and secondary infections.

Eyelashes infestation (phthiriasis palpebrarum/ciliaris) in children may lead to blepharitis and conjunctivitis.

Diagnosis is clinical, based on inspection. Bites can leave small (<1 cm) gray-blue spots (maculae ceruleae).

Treatment includes mechanical removal and topical pediculicides: permethrin (1-5%), pyrethrins (0.3-0.5%), malathion (0.5-1%), or lindane (1%).

Washing linens, hygiene, and sexual abstinence help prevent reinfestation.

TAXONOMY AND CLASSIFICATION:

The spelling Pthirus, fixed in 1958, stems from a misspelling of the Greek phthirus. It is followed by entomologists, though parasitologists often retain Phthirus, preserved in names like Phthiraptera and Rhynchophthirina.

PHYLUM: Arthropoda **CLASS:** Insecta **ORDER:** Phthiraptera **SUBORDER:** Anoplura **FAMILY: Pthiridae GENUS:** Pthirus

SPECIES: P. pubis (Linnaeus, 1758)

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Declaration of interests

The authors declare no competing interests.

Resources

https://www.cdc.gov/dpdx/pthiriasis/index.html https://www.ncbi.nlm.nih.gov/books/NBK459226/

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