

# Eyelash mite - safety note

*Demodex* is a genus of tiny (0.3–0.4 mm) commensal mite, two species of which live principally in or near the eyelash follicles and their associated sebaceous glands of humans. The presence of *Demodex* increases with age, with an incidence of less than 25% in those under 20 years to almost 100% in those over 70 years. Density is higher in patients with blepharitis, rosacea and acne vulgaris. Infestation is usually asymptomatic, although high levels of infestation may cause inflammation.

*Demodex* are photophobic and tend only to appear on the skin surface at night. The most common method of sampling *Demodex* is by eyelash hair epilation. Sampling may also be done by skin scrapings. Samples are viewed microscopically using HP (x40) objective.

Sampling *Demodex* in schools is not recommended. The size, density and location of mites make it difficult to ensure that a sample will contain mites. In addition students may find it difficult to locate individual mites under the microscope. Also individuals with skin conditions about which they may be sensitive are more likely to produce samples with mites. The inevitable public exposure may

make them feel uncomfortable. Sampling mites by eyelash hair epilation must not be attempted in schools. Skin scrapings have been suggested using a glass microscope slide, long fingernail, side of a knife or spatula blade. None of these methods are recommended. It is a general rule that where samples are taken from human tissue, students must only work with their own samples. Such sampling methods should use sterile, single use disposable instruments (e.g. the ice cream spoons sold with small cartons of ice cream can be purchased in bulk relatively inexpensively and would suffice for a skin scrape). However the suggested method of obtaining a skin scrape sample suggests exerting a significant degree of force to express sebum. The exertion of a degree of force is not recommended. ◀

## References

- [http://biologyclermont.info/wwwroot/courses/lab2/lab2\\_all.pdf](http://biologyclermont.info/wwwroot/courses/lab2/lab2_all.pdf)
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3884930/>
- <http://www.bbc.com/earth/story/20150508-these-mites-live-on-your-face>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4703014/>