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Closeups of a not-so-domestic mite tritonymph

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In a recent issue of Allergo Journal International, K .-C. Bergmann published a mini-review on the biology of house dust mites and storage mites [1]. This excellently written article made us wonder about the potential fauna present in our imaging facilities.

As opposed to biolabs and chemical labs, imaging facilities contain a wealth of dust. Not only are cleaning rules for such facilities less strict, most, if not all,

physicists prefer that cleaning staff do not touch any equipment at these facilities.

The purpose of this study was to literally zoom in on a dust flake that had fallen onto a preparation slide.

The microscopic slide used for imaging had been prepared the same way as those prepared for scanning electron microscopy published in a prior study [2].

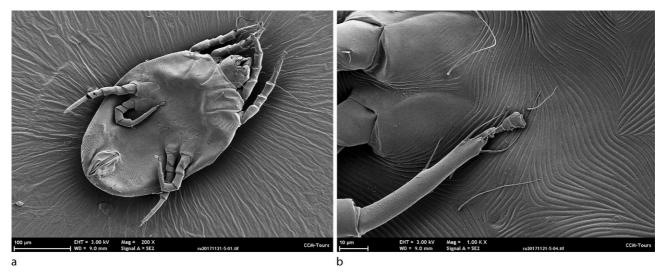


Fig. 1 Ventral view of a tritonymph (a) and closeup up with fourth leg and genital papillae (b)

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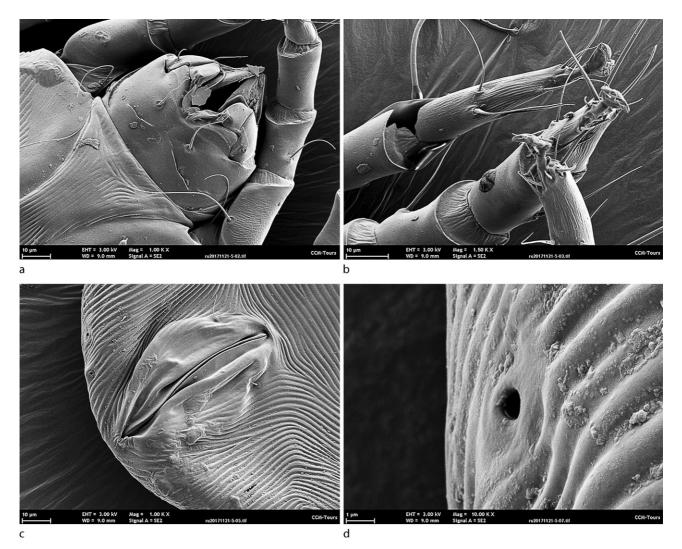


Fig. 2 Closeups of the head (a), the first and second pairs of legs (b), the posterior margin (c), and a pore in the posterior margin (d)

The resulting scanning electron microscope image is shown in Fig. 1a.

By following identification keys [3, 4], we identified the mite to be in the tritonymph stage.

The genitalia were indeed absent. Instead, the closeup of the ventral area between the third leg pair shows two pairs of genital papillae [3], as demonstrated in Fig. 1b.

For illustrative purposes, we have added closeups of the head, the first and second pairs of legs, the posterior margin, and a pore in the posterior margin, all shown in Fig. 2.

In summary, Bergmann (2022) [1] may have inadvertently given imaging physicists an additional reason to avoid cleaning their facilities: to image most interesting microfauna.

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 $\begin{tabular}{ll} \textbf{Conflict of interest} & R. \ Uzbekov, \ A. \ Bouakaz, \ and \ M. \ Postema \ declare that they have no competing interests. \end{tabular}$

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