



## Storage mites – what are they?

Storage mites (*Lepidoglyphus destructor*, *Glycyphagus domesticus*, *Tyrophagus putrescentiae*, *Acarus siro*, *Aleuroglyphus ovatus*, *Suidasia medanensis* and *Thyreophagus entomophagus*) were first found in grain silos where they thrive in and feed on dry grains. Farmers and workers in environments where hay and grain are stored and handled may develop an allergic sensitivity to these mites. Storage mites are often found in grain bins and dry feed stuffs including dog and cat food. Pets exposed to stored product mites by consumption of food containing these mites are therefore at risk of sensitisation and allergic reaction. Storage mite bodies and mite faeces are a source of potent allergens.

Dogs and cats may be exposed to mite body parts and excreta through inhalation and percutaneous absorption of such allergens.

Storage mites are smooth, wingless, soft-bodied, eight-leg creatures measuring less than 0.5 mm. they may be also dispersed in the air but also have suckers which enable them to attach to insects and other animals for distribution. They breed rapidly under favourable conditions of high ambient temperature and relative humidity. At 25C with a90% humidity *Acarus siro* can multiply seven folds in 1 week. One kilo of stored food may contain several million mites.

One of the storage mites, *Tyrophagus putrescentiae*, the mould mite, is very common but usually goes unnoticed except in occasions when it becomes abundant. Mould mites only develop where there is moisture or high humidity. Infestations have been found in cheese, flour, grain, seeds, bulbs, straw, wallpaper, furniture, dried fruits, and cereal foods. Since even dry foods have some amount of moisture (usually around 10%) they are susceptible to mould and provide an optimum breeding ground for the storage mites.

Hypersensitivity to storage mites is a worldwide problem. Data and information regarding allergy to storage mites has increased rapidly over recent years. Hyposensitisation therapy can be effective in atopic patients with storage mite allergy. Some patients are sensitive only to mites, and in these cases immunotherapy is highly effective. In addition, an effective environmental control regimen can prove useful in minimising the patient's discomfort and lessening immediate signs of allergy. Although it is virtually impossible to totally eliminate storage mites from the environment, steps can be taken to inhibit their multiplication and thereby minimise exposure to storage mite allergens.

The following suggestions should prove useful in controlling storage mite populations:

- Store pet foods in airtight containers. Avoid storage of pet food in garages, sheds.
- Do not use old or outdated pet food. Check food for dust, mould or odours and remove questionable food from the house and discard immediately.
- Avoid feeding the crumbs at the bottom of the container
- Wash food containers frequently in detergent and HOT (90°C) water. Dry completely before refilling with food.
- Dispose of pet food bags immediately outside of the house.
- Do not stockpile foods. Purchase only what is needed for 30 days at a time.
- Avoid keeping old fruit and other foods that can go mouldy.
- Check food bags for tears or holes prior to purchase.
- Low quality pet foods with a high quantity of particulate debris at the bottom of the bag should be avoided.