Mites of Medical Importance

1  Stigmata present as one lateral pair between bases of legs II and IV.................................................................2
   - Stigmata absent posterior to coxae II.................................6
2  Legs short and stubby, anterior two pairs ending in discs, posterior two pairs ending in long bristles (Sarcoptidae)...........................................Sarcoptes scabiei
   - Legs normal and all similar in structure..............................3
3  Body with two pairs of long posterior marginal setae (Pyroglyphidae)...............................Dermatophagoides sp.
   - Body with four pairs of long posterior marginal setae (Acaridae)................................................Tyrophagus sp.
4  Body unusually elongate, with worm-like annulations, asetose (Demodicidae).................................Demodex sp.
   - Body not unusually elongate, setose................................5
5  Capitulum and palps conspicuous; body with feathery setae (parasitic larval stage – three leg pairs)
   .............................................................Trombiculidae sp.
   - Capitulum and palps inconspicuous; body with simple, non-feathery setae; not parasitic on vertebrates; females usually gravid (Pyemotidae)................Pyemotes tritici
6  Chelicerae long and whip-like, tapering apically, chelae at tips absent or very small (Dermanyssidae)........7
   - Chelicerae not long and whip-like, shorter and stronger, chelae at tips blade-like, with or without teeth.................................................................8
   - Body dorsally with one shield; anal shield not egg-
shaped, with anal opening at posterior end

8  Dorsal shield clearly not covering dorsal body surface; genitoventral shield narrowed posteriorly; chelicerae with toothless chelae (Macronyssidae)

- Dorsal shield covering dorsal body surface; genito-ventral shield not narrowed posteriorly; chelicerae usually with tooth chelae (Laelapidae)

9  Dorsal shield narrow and tapering posteriorly, with long setae

- Dorsal shield broad, with short setae

10 Sternal shield with two pairs of setae

- Sternal shield with three pairs of setae

11 Genitoventral shield not widened posteriorly, with one pair of setae

- Genitoventral shield widened posteriorly, with more than one pair of setae

12 Body densely setose

- Body with few setae, setae arranged in transverse rows

13 Genitoventral shield with pear-shaped outline

- Genitoventral shield with large subcircular outline

14 Genitoventral shield with concave posterior margin, surrounding anterior part of anal shield

- Genitoventral shield with convex posterior margin, not surrounding anterior part of anal shield