Zaprionus indianus:

taxonomic position and species identification

Kim van der Linde, Department of Biological Science, Florida State University, Tallahassee, FL 32306-1100, USA. e-mail: kim@kimvdlinde.com

Zaprionus indianus is assigned to the subgenus *Zaprionus*, species group *armatus* and species subgroup *vittiger* (Chassagnard & Tsacas 1993). I provide here the diagnostic characters of this species and higher taxonomic levels because the published keys (Chassagnard 1988; Chassagnard & Tsacas 1993) are in French.

- **Genus**: Most species of the genera *Zaprionus* (including *Z. indianus*), *Zaropunis* and *Phorticella* have distinctive silvery-white stripes on the top of the head and the thorax. Some species in the subgenus *Anaprionus* (genus *Zaprionus*) lack the silvery white stripes and can be confused with other striped drosophilid species. The lobes of the epandrium are truncated in *Phorticella* but finger-like in *Zaprionus*, and the anterior orbital bristle is long in *Zaprionus* but short in *Phorticella*.
- **Subgenus**: Within the genus *Zaprionus*, the subgenus *Zaprionus* has an even number of stripes across the thorax, whereas the subgenus *Anaprionus* has an odd number of stripes.
- **Species group**: The species of the *armatus* group are characterized by anterior femora that have either one large spine on a prominent tubercle (subgroup *tuberculatus*) or a series of large spines (subgroups *vittiger* and *armatus*), whereas the species of the *inermis* group lack these spines.
- **Species subgroup**: The species of the *vittiger* subgroup, including *Z. indianus*, have 4 to 6 composite spines, each of which has a second short branch at its base. These spines function as a rest for the tibia when the leg is folded. The species of the *armatus* subgroup have simple spines, whereas the species of the *tuberculatus* subgroup have a single long and prominent simple spine on a large tubercle.
- **Species**: Within the *vittiger* subgroup, *Z. indianus* is identified by its overall yellowish (not brown) thorax and abdomen, and by the narrow (relative to those of the other species) silver bands bordered by black bands across the head, thorax and scutellum. The black bands do not widen on the scutellum, and the scutellum is without a white tip. The composite spines are not located on small tubercles as in some other species within the subgroup. The basal part of the "collerette" (Chassagnard 1988), a structure surrounding the gonopore of the distiphallus, is not serrated and ends into a point which lies on the distiphallus surface (other species have different serration, often round ends not touching the distiphallus surface).

Special thanks go to Stephane Prigent for his insightful comments.

References:

CHASSAGNARD, M. T. 1988. Esquisse phylogénétique du genre *Zaprionus* Coq. (Diptera: Drosophilidae) et description de trois nouvelles espèces afrotropicales (in French). Le Naturaliste Canadien 115: 305-322.

- CHASSAGNARD, M. T., and L. TSACAS. 1993. Le sous-genre *Zaprionus* S.Str.: définition de groupes d'espèces et révision du sous-groupe *vittiger* (Diptera: Drosophilidae) (in French). Ann. Soc. Entomol. France (N.S.) 29: 173-194.
- Cite as: Kim van der Linde (2006). *Zaprionus indianus*: taxonomy and species identification. http://www.kimvdlinde.com/professional/Zaprionus_indianus.html

© Kim van der Linde, 2006