

extends to dorsal ridge. Ventral arm with two abrupt changes in thickness; thickest along ramus, which is paralleled by a thinner band, then an even thinner band leading to the fulcral arm. Fulcral arm short, linear; may partially overlap posterior arm in some preparations. Plate with 7-9 intervalvifer, 24-29 ramal, 3-4 + 0 fulcral arm sensilla in workers of all species, except the larger *tuberculatum*, which has 8-11 intervalvifer, 39-45 ramal and 3 + 0 fulcral arm sensilla.

Gonostylus (Figs. 11-13). Distinctly 2-segmented. Proximal segment in the four smaller species with 10-14 setae/chaetae ranging from very short to long and arranged in two more or less distinct patches: a posterodorsal patch containing the longest setae and a posteroventral patch generally with very short chaetae/setae. Proximal segment in the larger *tuberculatum* (Fig. 12) with an additional, more or less distinct anterior patch. Distal segment in all species with 1-4 setae or chaetae anterodorsally and 3-7 campaniform sensilla dorsad. Apex of distal segment with a short dorsoterminal chaeta and long companion seta in *permagnus*, *lugens*, and *quadridens* (Fig. 13), but with only the dorsoterminal chaeta in *tuberculatum* (Fig. 12), and no terminal sensillum in *ruidum* (Fig. 11). Apex not notched.

Triangular Plate (Fig. 14). Large, compact, with short dorsoapical and ventroapical processes. Medial tubercle on ventral process. Large lateral tubercle on body of plate.

Lancet (Fig. 14). Short, heavily sclerotized, with two large valves; distal smaller. Apex narrowed to a stiff spine; no apical barbs.

Sting (Figs. 15, 16). Short and heavily sclerotized. Sting shaft very short (43-45% of StingL; IR 0.26-0.29), deep, with large hemocoel; apex acute, about as wide as deep, without appendages. Valve chamber markedly higher than base of sting shaft and almost as long (36-40% of StingL). Sting bulb short; sting base with large basal ridge not strongly arched in anterior view; truncate in ventral view; anterolateral corners moderately prominent. In ventral view the sting tapers almost uniformly from base to apex.

Furcula (Figs. 15, 16). Weakly arched, no dorsal arm. Ventral arms overlapping sting base but not fused to it.

Pygidium. No sign of reservoir, ductules, characteristic sculpture or emargination of pygidium that might indicate presence of pygidial

glands. Apex blunt, lined with short hairs. Lateral pilosity on posterior half of plate.

Hypopygium. Apex notched and lined with stiff hairs; no spines or blunt bristles. Pilosity on posterior half of plate, including along midline.

4. *Gnamptogenys*

Specimens examined: *G. annulata*, 2 workers, Venezuela, Amazonas, Alto Río Saipa, 530m, 4-II-89, J. Lattke 1258. *G. bispinosa*, 2 workers, Costa Rica, Río Reventazón, 4 km E. Turrialba, 18-22-I-73, W. L. Brown. *G. brunnea*, 2 workers, Colombia, Chocó, Finca Los Guaduales, 760 m, 2-VII-78, C. Kugler. *G. continua*, 2 workers, Venezuela, Táchira, San Cristóbal, Quebrada La Parada, 1100m, 13-IX-89, J. Lattke 598. *G. gracilis*, 2 workers, Venezuela, Bolívar, vía El Dorado-Santa Elena km 155, 1200m, 20-V-85, J. Lattke 671. *G. horni*, 2 workers, Venezuela, Bolívar, Isla Ratón, Cañón del Diablo, 500m, 18-IV-89, J. Lattke 1439. *G. interrupta*, 1 worker, Venezuela, Aragua, Parque Nacional Henri Pittier, Rancho Grande, 1000m, J. Lattke. *G. moelleri*, 2 workers, Venezuela, Barinas, Res. For. Ticoporo, 240m, 26-VIII-87, J. Lattke 1145. *G. mordax*, 2 workers, Venezuela, Zulia, El Tucuco, 6-IX-84, J. Lattke 598. *G. porcata*, 2 workers, Venezuela, Táchira, Siberia, 39.7 km WNW San Cristóbal, 1200m, 28-VIII-88, J. Lattke 1204. *G. nr. strigata*, 2 workers, Ecuador, Bolívar, 20 km vic. Balzapamba, 1850m, 18-IX-86, N. Zalaba. *G. sulcata*, 2 workers, Venezuela, Táchira, vía San Cristóbal-La Fría, Quebrada La Elanca, 550m, 9-VIII-83, J. Lattke 356. *G. tornata*, 2 workers, Venezuela, Aragua cr. Cumboto, 90 km N. Maracay, 50m, 23-VI-84, J. Lattke 521. *G. tortuolosa*, 2 workers, Venezuela, Amazonas, Alto Río Mavaca, 200m, 5-II-89, J. Lattke 1279. *G. triangularis*, 1 queen, 1 worker, Venezuela, Miranda, Parque, Los Mariches, 1200m, 19-IV-86, J. Lattke 905.

Spiracular Plate (Figs. 17, 21, 30, 32). In all species well developed, with spiracle small, positioned at or very near posterior edge; dorsal notch deep; median connection band-like, widest mesad. Plate shape varies continuously from nearly square (Fig. 17) to somewhat parallelogram-shaped (Fig. 21), to a narrow oval due to reduction of posteroventral corner (Figs. 30, 32).

Quadrat Plate (Figs. 23, 33). Larger than spiracular plate. Apodeme with thick anterior edge and well developed medial and lateral lobes on dorsal edge; lateral lobe in most species also