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Redescriptions are given for *Mesocriconema surinamense* (De Grisse & Maas, 1970) Loof & De Grisse, 1989, associated with *Dicorynia guianensis* Amshoff and *Rotylenchus caudaphasmidius* Sher, 1965 associated with a species of *Aspidosperma* Martius & Zuccharini in a French Guiana rain forest. These are new records for that country. Males of *M. surinamense* are described for the first time and are characterized by a squared labial disc and a comparatively small bursa. *Discocrinemella heynsi* Van den Berg & Marais, 1995 is proposed as a synonym of *M. surinamense*. *Discocrinemella limitanea* (Luc, 1959) De Grisse & Loof, 1965 is reported from soil around *D. guianensis*.

**Keywords:** Discocrinemella, new synonymy, redescriptions, Rotylenchus, taxonomy.

Logging and other activities are bringing about great changes in tropical rain forests in French Guiana. The structure and regeneration of these forests are at present being investigated (Sabatier & Prevost, 1990). Despite taxonomic and ecological studies on plant nematodes in rain forests the effects of nematodes on adult trees are still unknown. Knowledge of the composition of nematode communities in rain forests is essential for our understanding of forest ecology and the role and importance of nematodes in these forests. One of us (P.Q.) is at present conducting nematological surveys in French Guiana rain forests.

In this paper redescriptions are given for *Mesocriconema surinamense* (De Grisse & Maas, 1970) Loof & De Grisse, 1989, associated with *Dicorynia guianensis* Amshoff and *Rotylenchus caudaphasmidius* Sher, 1965 associated with a species
of *Aspidosperma* Martius & Zuccharini in a French Guiana rain forest. *Discocriconemella limitanea* (Luc, 1959) De Grisse & Loof, 1965 is reported from soil around *D. guianensis*. This tree is currently being exploited for export purposes. Males of *M. surinamense* are described for the first time.

*D. heynsi*, described from forest soil at Manaus, Brazil is considered by Vovlas (pers. comm.) to belong in *Mesocriconema* because of the presence of four large, well-separated submedian lobes in the female. As little difference exists between females of this species and *M. surinamense*, *D. heynsi* is proposed here as a synonym of *M. surinamense*.

**MATERIALS AND METHODS**

Specimens were extracted from the soil by the elutriation method of Seinhorst (1962), relaxed in water by gradual heating, fixed in TAF and mounted in anhydrous glycerine by the slow method (Hooper & Evans, 1993). For scanning electron microscopy, TAF-fixed specimens were dehydrated in an alcohol series. Following conventional critical-point drying and gold-palladium coating (21 nm) specimens were viewed with a Philips XL 30 stereoscan microscope at 10 kV.

Five males of *M. surinamense* are deposited in the National Collection of Nematodes, Plant Protection Research Institute, Pretoria, South Africa and three males deposited in the collection of the Muséum National d’Histoire Naturelle, Paris, France.

**DESCRIPTIONS**

*Mesocriconema surinamense* (De Grisse & Maas, 1970)
Loof & De Grisse, 1989 (Figs 1A-H; 2A-F)

*Discocriconemella surinamense* De Grisse & Maas, 1970
*Mesocriconema surinamense* Loof & De Grisse, 1989

Females were originally described from around forest vegetation at Boboenhol, Surinam. Both sexes are described here, the male for the first time, collected from *D. guianensis* at Saül, French Guiana (#14157) by second author. This is the first record of this species in French Guiana.

*Females* (*n* = 8). $L = 441 \pm 30.2$ (395-495) $\mu$m; $a = 9 \pm 0.4$ (9-10); $b = 4$; $c = 22 \pm 2.2$ (18-26); $o = 9 \pm 1.3$ (7-11); $V = 91 \pm 0.7$ (90-92); $OV = 56 \pm 13.8$ (41-79); stylet $= 67 \pm 1.6$ (64-69) $\mu$m; $R = 88 \pm 2.2$ (85-91); $Rst = 16 \pm 1.2$