

of those organs. So far as was known to Brölemann, the phallopod of *Sphæriodesmus*, apart from the basal segment, consisted of an elongated tibio-femoral segment with or without accessory branches and processes, but with the seminal duct opening upon the seminal style situated at or near the apex of the organ. But in *Colobodesmus* the large and stout femoral segment is followed by a very short subannuliform tibial segment, bearing a short and conical process upon which the seminal duct opens. Beyond this the tibia is produced into two relatively very large, somewhat lamellar, but irregularly shaped plates projecting far in advance of the orifice of the seminal duct, which is thus remote from the distal end of the phallopod.

Brölemann adds to his diagnosis of this genus the remark that the species described as *S. gracilis* by Saussure and Humbert appears to belong to *Colobodesmus*. If so, *Colobodesmus* is a synonym of *Cylionus*. On the other hand, there cannot be much doubt that *C. gracilis* and *C. constrictus* are congeneric; and the very considerable similarity that the phallopod of *C. constrictus* presents to the phallopod of *Cyclodesmus aztecus* (in which the seminal duct opens, according to Carl, just behind the tip of that organ) points to the existence of the same difference between *Cylionus* and *Colobodesmus* as between *Colobodesmus* and *Sphæriodesmus* with respect to the termination of the seminal duct.

In the new species of *Sphæriodesmus* described in the preceding pages I have not traced the course of the seminal duct and the position of its orifice. But the discovery of some of these species, notably of *S. prehensor*, shows that the structure of the phallopods is far more variable than Brölemann supposed. Nevertheless the structure of this organ suggests in all cases that the orifice of the seminal duct is subterminal. Even in *S. robustus* there seems to be a distinct seminal style in the hollow of the shovel-shaped termination of the phallopod. Brölemann unfortunately does not describe in *Colobodesmus* the shape of the posterior borders of the inferior surface of the segments, so that it is unknown whether his genus approaches *Sphæriodesmus* or *Cylionus*, or is unlike both in this respect.

1. *Colobodesmus biolleyi*, Bröl.

Colobodesmus biolleyi, Brölemann, Ann. Soc. Ent. Fr. lxxiv. p. 350, t. 8. figg. 8-12, t. 9. figg. 13, 14 (1905) ¹.

From the long description of this species it is difficult to pick out definite specific features apart from those belonging to the male sex. Brölemann says, however, that the anterior and posterior borders of the keel of the fourth segment are parallel, a statement which suggests that they are straight in a vertical line, and not convex and concave as in all the species of *Sphæriodesmus* and *Cylionus*. If they are curved in those genera they are not, strictly speaking, parallel. It also appears that the posterior angle of the keel is not in any sense produced, although acute. The first leg of the male has a large tuberculiform tooth on the base of the femur, and the latter segment is concave below, convex above. The socket of the phallopods is wide, as is also the sternal area between the posterior legs of the seventh segment.

Length(?), width up to 8.5 millim.

Hab. COSTA RICA, San José, Caché (*Biolley* ¹), Cariblanco (*Lankester* ¹).

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