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ABNORMAL PARABASAL SPINES IN THE MALE HYPOPYGIUM OF  
*ANOPHELES PSEUDOPUNCTIPENNIS*

Dr. Martini (Proc. Ent. Soc. Wash., 35: 64, 1933) has noted the duplication of one of the parbasal spines in a hypopygium of *Anopheles maculipennis* and mentions having seen the same abnormality in hypopygia of *A. pseudopunctipennis*. It seems worth while to record the fact that abnormalities of this sort occur much more frequently in *A. pseudopunctipennis* than in most species of *Anopheles*, and that they seem to occur more frequently in certain portions of its range than in others.

The table below summarizes the numbers of parbasal spines present in my material from several different localities. In specimens from Maracay, Venezuela, about 25 per cent of 123 hypopygia show duplication of one or more parbasal spines. In most of the abnormal specimens, only a single spine is duplicated, as in the cases mentioned by Martini, but in several specimens both of the side pieces have three parbasal spines, and in one specimen one of the side pieces has three spines and the other has four. In 129 hypopygia from the state of Vera Cruz, Mexico, on the other hand, only about 12 per cent are abnormal. About the same rate is found in 16 hypopygia from Panama, and in 46 hypopygia from the island of Grenada the proportion of abnormal is even less (about 9 per cent).

In the Mexican series there is one specimen in which the parbasal spines are reduced, only one being present on each side piece instead of the usual two.—FRANCIS M. ROOT, *School of Hygiene and Public Health, The John Hopkins University, Baltimore.*

*Anopheles pseudopunctipennis. Parbasal spines of male hypopygium*

Locality	Reduced	Normal	Increased		
	1-1		2-2	2-3	3-3
Maracay, Venezuela .....		92	21	9	1
Vera Cruz, Mexico .....	1	114	10	4	
Grenada, British West Indies .....		42	4		
Panama Canal Zone .....		14	2		