

**Supplementary material 1:** Genetic distance  $p$  uncorrected (in %) COI between sampling locations of *P. latro*; 1) *P. latro* (Altamira); 2) *P. latro* (Brasil Novo); 3) *P. latro* (Medicilândia); 4) *P. latro* (Santarém); 5) *P. latro* (Vitória do Xingu); 6) *P. latro* (Anapu); 7) *P. latro* (Senador José Porfirio); 8) *P. fenestratus* (Borba); 9) *P. fenestratus* (Manaus); 10) *P. latro* (Marabá); 11) *Pristimantis* sp.; (Maranhão); 12) *P. zeuctotylus* (Monte Alegre); 13) *P. bipunctatus* (Peru) and 14) *P. vilarsi* (Colombia).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1														
2	0.2													
3	0.4	0.2												
4	2.0	2.2	2.2											
5	0.1	0.4	0.5	1.9										
6	3.1	3.4	3.4	3.1	3.0									
7	2.9	3.1	3.2	4.6	2.8	3.5								
8	20.2	20.4	20.3	19.7	20.1	19.6	20.5							
9	20.4	20.7	20.5	19.7	20.3	21.1	21.8	12.8						
10	6.0	6.2	6.1	5.1	5.8	5.9	8.3	20.0	19.9					
11	11.1	11.3	11.3	10.1	10.9	11.7	13.0	19.7	20.2	10.3				
12	21.0	21.0	21.0	21.3	21.0	21.9	22.6	21.6	21.4	21.7	19.7			
13	20.0	20.1	20.1	20.7	19.9	21.2	22.1	20.5	21.1	20.5	20.8	18.6		
14	23.0	23.1	23.1	22.6	22.9	23.1	25.0	21.7	20.8	22.2	21.3	18.5	17.6	