

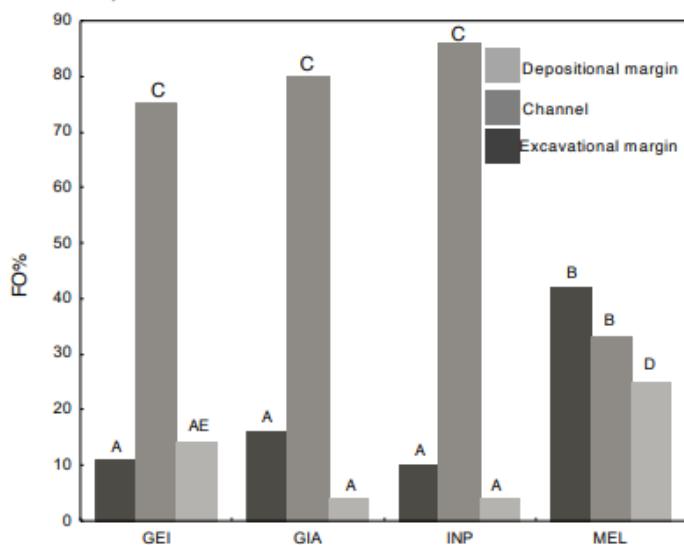
SMF 1. Geographic location of **A**. Brazil, **B**. Reserva Forestal Adolpho Ducke (RFAD) north of the city of Manaus, and **C**. sampling sites for specimen collection and underwater observations in the studied streams (●).

SMT 1

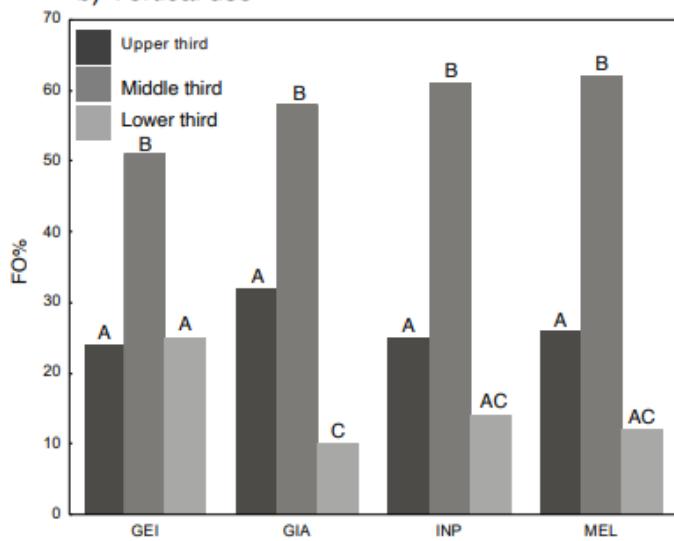
Co-occurrence situations in which the species were found in the studied streams

| Species | AC30 | BO13 | AC23 | AC13 | BO20 | BO12 | BO21 | BO22 |
|--|------|------|------|------|------|------|------|------|
| <i>Bryconops giacopinii</i> | X | | X | | X | X | X | X |
| <i>Bryconops inpai</i> | | | | X | | | | |
| <i>Hypseobrycon</i> aff. <i>melazonatus</i> | | X | X | X | X | X | X | X |
| <i>Iguanodectes geisleri</i> | | | | | X | X | X | |

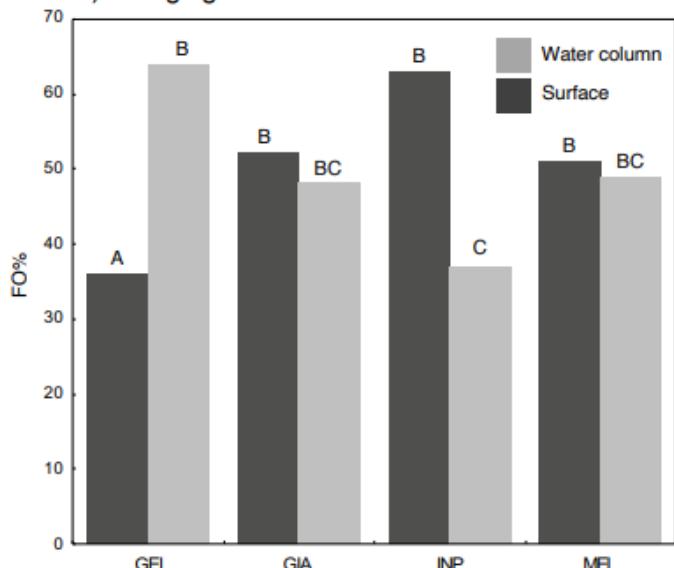
a) Horizontal use



b) Vertical use



c) Foraging



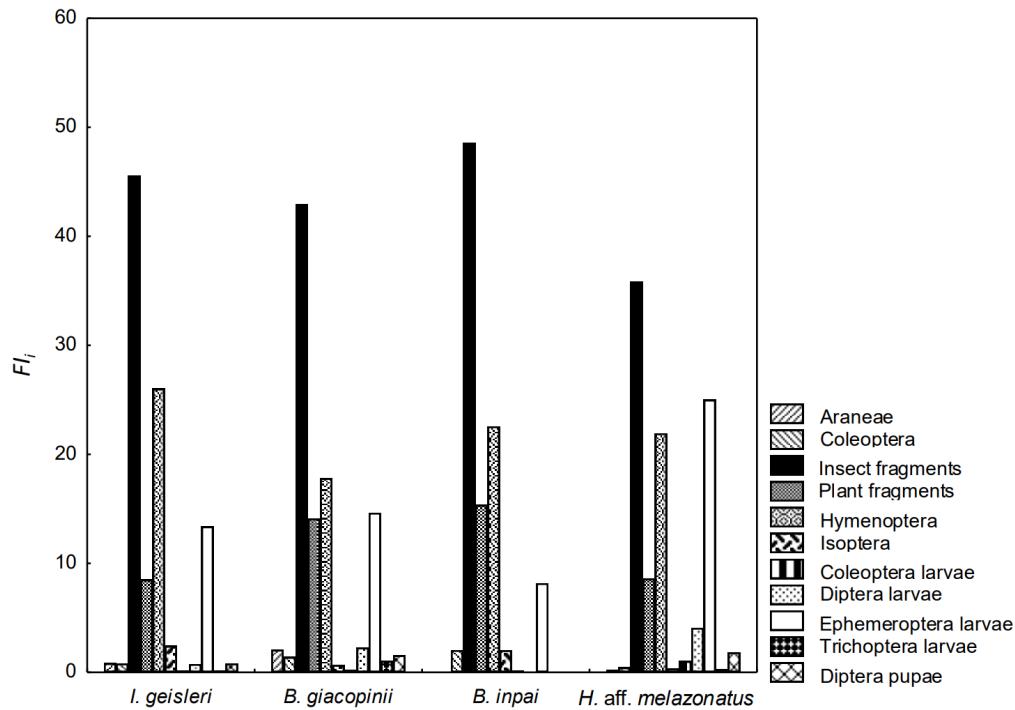
SMF 2. Frequency of Occurrence (FO %) for **A.** horizontal and **B.** vertical space use and **C.** foraging among the four species in the eight sampled streams. GEI = *Iguanodectes geisleri*; GIA = *Bryconops giacopinii*; INP = *Bryconops inpai*; MEL = *Hypessobrycon* aff. *melazonatus*. Significant differences ($p < 0.05$) in comparisons within species (water column x surface) and between species (water column or surface among GEI, GIA, INP, and MEL) are indicated by different letters.

SMT 2

Proportion of the Food Index (FI_i) for each food category found in the stomach contents of the four stream fish species studied in the Amazon Rainforest

| | <i>B. giacopinii</i> (n = 60) | | | <i>B. inpai</i> (n = 10) | | | <i>H. aff. melazonatus</i> (n = 70) | | | <i>I.</i> | <i>geisleri</i> (n = 30) | |
|---------------------------------|----------------------------------|-------|--------|-----------------------------|-------|--------|--|-------|--------|-----------|-----------------------------|--------|
| | F_i | V_i | FI_i | F_i | V_i | FI_i | F_i | V_i | FI_i | F_i | V_i | FI_i |
| Allochthonous food items | | | | | | | | | | | | |
| Isoptera | 16.67 | 2.98 | 0.68 | 30 | 5.56 | 2.03 | 17.14 | 1.51 | 0.35 | 43.33 | 4.71 | 2.43 |
| Hymenoptera | 98.33 | 13.14 | 17.81 | 100 | 18.54 | 22.56 | 87.14 | 18.64 | 21.93 | 96.67 | 22.55 | 26.03 |
| Plant Fragments | 83.33 | 12.29 | 14.12 | 90 | 14.02 | 15.35 | 75.71 | 8.40 | 8.59 | 86.67 | 8.22 | 8.50 |
| Insect Fragments | 96.67 | 32.22 | 42.94 | 100 | 39.92 | 48.59 | 94.29 | 28.14 | 35.81 | 96.67 | 39.50 | 45.59 |
| Coleoptera | 28.33 | 3.60 | 1.41 | 50 | 3.36 | 2.04 | 17.14 | 1.96 | 0.45 | 33.33 | 2.04 | 0.81 |
| Araneae | 33.33 | 4.52 | 2.08 | 0 | 0 | 0 | 10 | 1.45 | 0.20 | 33.33 | 2.12 | 0.84 |
| Autochthonous food items | | | | | | | | | | | | |
| Coleoptera Larvae | 16.67 | 0.84 | 0.19 | 10 | 1.42 | 0.17 | 22.86 | 3.36 | 1.04 | 23.33 | 0.59 | 0.16 |
| Diptera Pupae | 50 | 2.28 | 1.57 | 0 | 0 | 0 | 45.71 | 2.98 | 1.84 | 46.67 | 1.48 | 0.82 |
| Trichoptera Larvae | 36.67 | 2.07 | 1.05 | 0 | 0 | 0 | 18.57 | 1.05 | 0.26 | 16.67 | 0.76 | 0.15 |
| Ephemeroptera Larvae | 90 | 11.80 | 14.64 | 80 | 8.40 | 8.18 | 90 | 20.59 | 25.01 | 96.67 | 11.60 | 13.39 |
| Diptera Larvae | 58.33 | 2.83 | 2.28 | 10 | 0.13 | 0.02 | 64.29 | 4.71 | 4.09 | 40 | 1.61 | 0.77 |

The FI_i reflects the contribution and importance of each food category in the diet of the specimens. F_i is the frequency of occurrence and V_i is the relative volume.



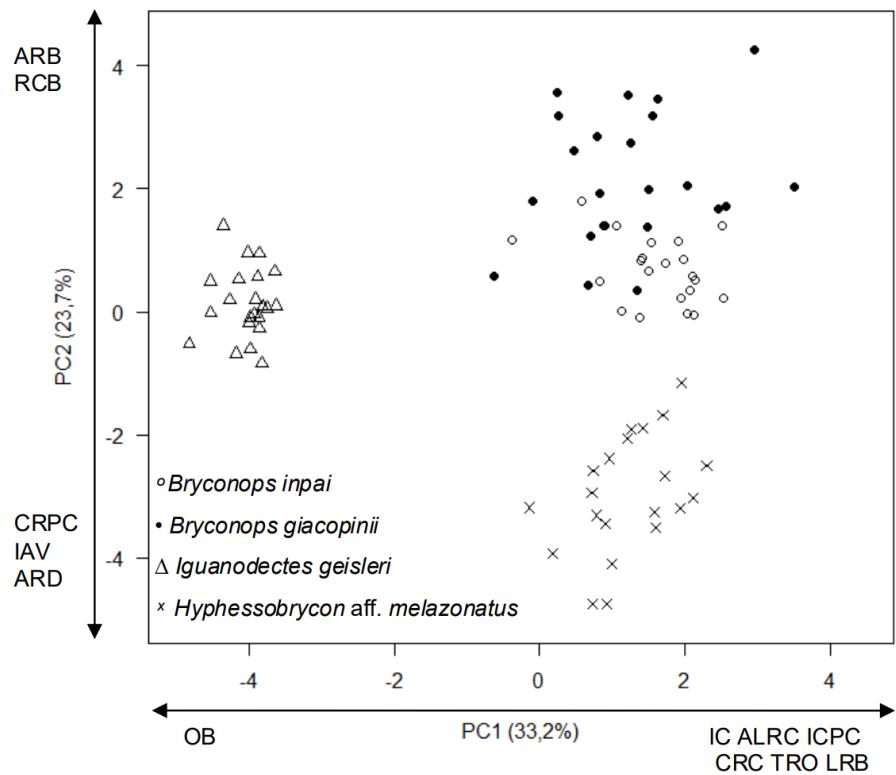
SMF 3. Proportion of the Food Index (FI_i) for each food category found in the stomach contents of the four stream fish species studied in the Amazon Rainforest. The FI_i reflects the contribution and importance of each food category in the diet of the specimens. Only food categories with an FI_i value greater than 1 for at least one species are shown.

SMT 3

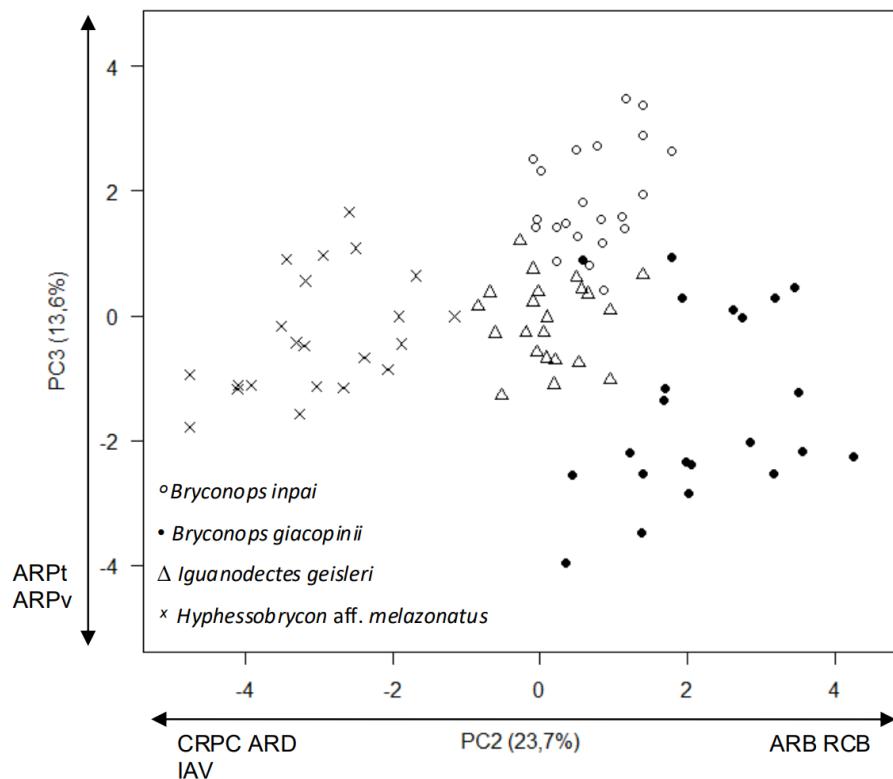
Results of the MANOVA test for differences in stomach content among species pairs with Holm-s correction ($p < 0.006$)

| Pairwise species | F | r^2 | p |
|------------------|--------|-------|--------|
| MEL-GIA | 51.335 | 0.45 | <0.001 |
| MEL-INP | 33.465 | 0.41 | <0.001 |
| MEL-GEI | 42.316 | 0.43 | <0.001 |
| GIA-INP | 2.318 | 0.37 | 0.016 |
| GIA-GEI | 2.071 | 0.29 | 0.018 |
| INP-GEI | 2.412 | 0.52 | 0.007 |

GIA—*B. giacopinii*; MEL—*H. aff. melazonatus*; INP—*B. inpai*; GEI—*I. geisleri*.



SMF 4. Principal Component Analysis (PCA)-PC1 and PC2. Distribution of individuals of the four species in the ecomorphological space. OB—mouth orientation; IC—compression index; ALRC—relative body height; ICPC—caudal peduncle compression index; CRC—relative head length; TRO—relative eye size; LRB—relative mouth width; ARB—relative mouth height; RAB—mouth configuration ratio; CRPC—relative caudal peduncle length; ARD—relative dorsal fin area.



SMF 5. Principal Component Analysis (PCA)-PC1 and PC2. Distribution of individuals of the four species in the ecomorphological space. CRPC—relative lenght of caudal peduncle; ARD—relative dorsal fin area; RAB—relative mouth height; RCB—mouth configuration ratio; ARPt—relative area of pectoral fin; ARPv—relative area of pelvic fin.

SMT 4

Results of the MANOVA test for morphological differences among species pairs, with a corrected significance level of $p < 0.006$ (Holm, 1979)

| Pairwise species | F | r^2 | p |
|------------------|--------|-------|--------|
| MEL-GIA | 29.022 | 0.40 | <0.001 |
| MEL-INP | 6.878 | 0.15 | <0.001 |
| MEL-GEI | 84.825 | 0.66 | <0.001 |
| GIA-INP | 24.264 | 0.36 | <0.001 |
| GIA-GEI | 56.223 | 0.57 | <0.001 |
| INP-GEI | 106.26 | 0.71 | <0.001 |

GIA—*B. giacopinii*; MEL—*H. aff. melazonatus*; INP—*B. inpai*; GEI—*I. geisleri*.