Stressors from production systems affect immune system and make fish vulnerable to pathogens[1]. In this study, we focused on use of propolis from a Brazilian stingless bees as an alternative food additive due their most interesting composition in bioactive compounds when compared to those produced by Apis[2].

**INTRODUCTION**

The aim of this study was evaluate use of stingless bees propolis as a food additive in juvenile tambaqui.

**METHODS**

Propolis ethanolic extract (PEE) were obtained from propolis collected in hives of Frieseomelitta sp and added in commercial diet according to treatments, as follow: 0; 1.5%; and 3.0% of PEE, trial period was 30 days and fish were fed twice a day.

After this period, 3 fish from each box were sampled and anesthetized with benzocaine to draw blood and weighed. The rest were challenged with heat-killed Aeromonas hydrophila (10⁸ UFC mL⁻¹), and than sampled at 3 and 24 hours after bacterial challenge.

The weight values were used in growth performance parameters and blood was used to determine globulins and leukocytes respiratory activity.

**RESULTS & DISCUSSION**

Innate and acquired immune system of tambaqui were stimulated by PEE. At basal collections and 3 hours after the bacterial challenge, total globulin and leukocyte respiratory activity were significantly higher in fish fed 1.5% PEE. And it can verify that the supplementation of PEE, in the tested concentrations, did not significantly affect the weight gain, however, both PEE treatments had lower coefficient of variation, when compared with the control treatment, which indicate greater uniformity of fish.

**CONCLUSION**

According to obtained results, the inclusion of 1.5% of PEE in the diet improved weight uniformity and promoted a better immune response for tambaqui.

**REFERENCES**
