EuroSciCon



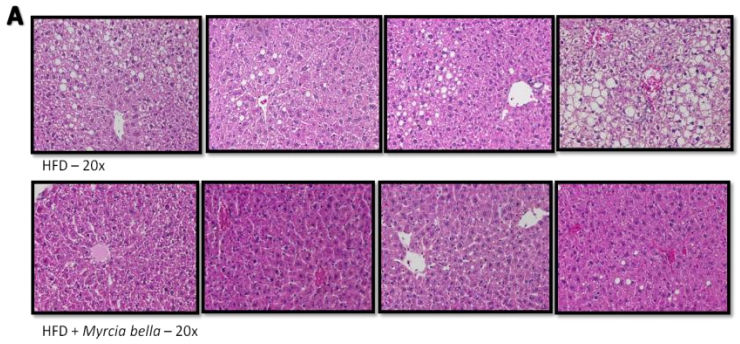
MOLECULAR MECHANISMS INVOLVED IN LIPID METABOLISM MODULATION BY THE AQUEOUS EXTRACT OF *Myrcia bella* IN MICE

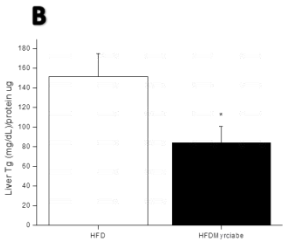
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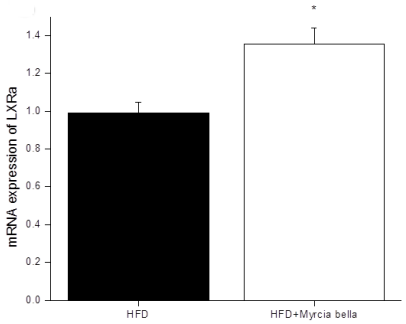
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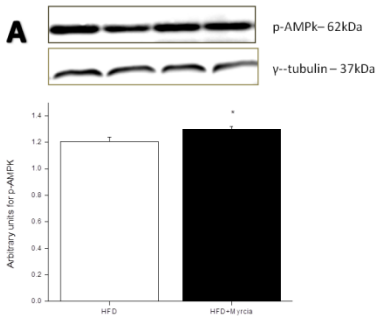
Non-alcoholic fatty liver disease (NAFLD) is the most common liver disease and is associated with obesity, insulin resistance and type 2 diabetes. The incidence of NAFLD has increased worldwide and the risks to develop steatosis, cirrhosis as well as cardiovascular diseases are elevated. *Myrcia bella* is a plant belonging to Myrtaceae family found in Brazilian Savanna. Relates from the literature has shown that the administration of the crude extract of *M. bella* in type 1 diabetic mice improve glucose and lipid metabolism. Thus, the aim of this study was to investigate the effect of *M. bella* supplementation in a high fat diet induced non-alcoholic fatty liver disease in mice. C57BL/6 mice were submitted to 12 weeks of HFD including 8 weeks of *M. bella* supplementation. Physiological and biochemical parameters, immunoblotting assays, gene expression and histology were used to investigate the effects of *M. bella* supplementation. After 8 weeks, the *M. bella* supplementation improved glucose tolerance and decreased hepatic triglycerides content compared to the group which received only HFD. Furthermore, the treatment increased AMPK and ACC phosphorylation as well as LXR mRNA expression. Thus, the results indicate that the crude extract of *M. bella* has potential to modulate hepatic lipid metabolism.

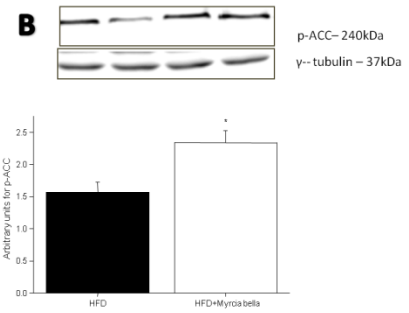
Keywords—*Myrcia bella, lipid metabolism, NAFLD, liver.*











Professional Biography

Brazilian biologist that has completed her PhD at São Paulo State University in 2017. During her carrier, she has dedicated to investigate the mechanisms involved in the effects of the crude extract of *Myrcia bella* in glucose and lipid metabolism. She had the opportunity to perform an internship in ETHZ in Zurich where she improved her scientific expertise. She already participated of many congresses as listener, speaker and referee.

