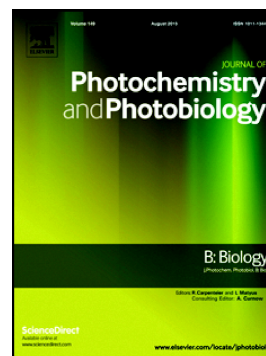


## Accepted Manuscript

Detecting urine metabolites related to training performance in swimming athletes by means of Raman spectroscopy and principal component analysis

Leticia Parada Moreira, Landulfo Silveira, Marcos Tadeu Tavares Pacheco, Alexandre Galvão da Silva, Debora Dias Ferraretto Moura Rocco



PII: S1011-1344(18)30149-0  
DOI: doi:[10.1016/j.jphotobiol.2018.06.013](https://doi.org/10.1016/j.jphotobiol.2018.06.013)  
Reference: JPB 11279

To appear in: *Journal of Photochemistry & Photobiology, B: Biology*

Received date: 8 February 2018  
Revised date: 19 June 2018  
Accepted date: 21 June 2018

Please cite this article as: Leticia Parada Moreira, Landulfo Silveira, Marcos Tadeu Tavares Pacheco, Alexandre Galvão da Silva, Debora Dias Ferraretto Moura Rocco , Detecting urine metabolites related to training performance in swimming athletes by means of Raman spectroscopy and principal component analysis. Jpb (2018), doi:[10.1016/j.jphotobiol.2018.06.013](https://doi.org/10.1016/j.jphotobiol.2018.06.013)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**Detecting urine metabolites related to training performance in swimming athletes by means of Raman spectroscopy and principal component analysis**

*Letícia Parada Moreira<sup>1</sup>, Landulfo Silveira Jr.<sup>1,2</sup>, Marcos Tadeu Tavares Pacheco<sup>1,2</sup>, Alexandre Galvão da Silva<sup>3</sup>, Debora Dias Ferraretto Moura Rocco<sup>1</sup>*

<sup>1</sup> Universidade Santa Cecília - UNISANTA, Rua Oswaldo Cruz, 277, Santos, São Paulo 11045-907, Brazil.

<sup>2</sup> Center for Innovation, Technology and Education - CITE, Universidade Anhembi Morumbi - UAM, Parque Tecnológico de São José dos Campos, Estr. Dr. Altino Bondensan, 500, São José dos Campos, São Paulo 12247-015, Brazil.

<sup>3</sup> Laboratory of Exercise Physiology and Health, Hospital Bandeirantes - BAND-COR, Rua Barão de Iguape, 209, São Paulo, São Paulo 01507-900, Brazil.

**Corresponding Author:** Landulfo Silveira Jr., Center for Innovation, Technology and Education - CITE, Universidade Anhembi Morumbi - UAM, Estr. Dr. Altino Bondensan, 500, São José dos Campos, SP, 12247-016, Brazil.

Download English Version:

<https://daneshyari.com/en/article/6493234>

Download Persian Version:

<https://daneshyari.com/article/6493234>

[Daneshyari.com](https://daneshyari.com)