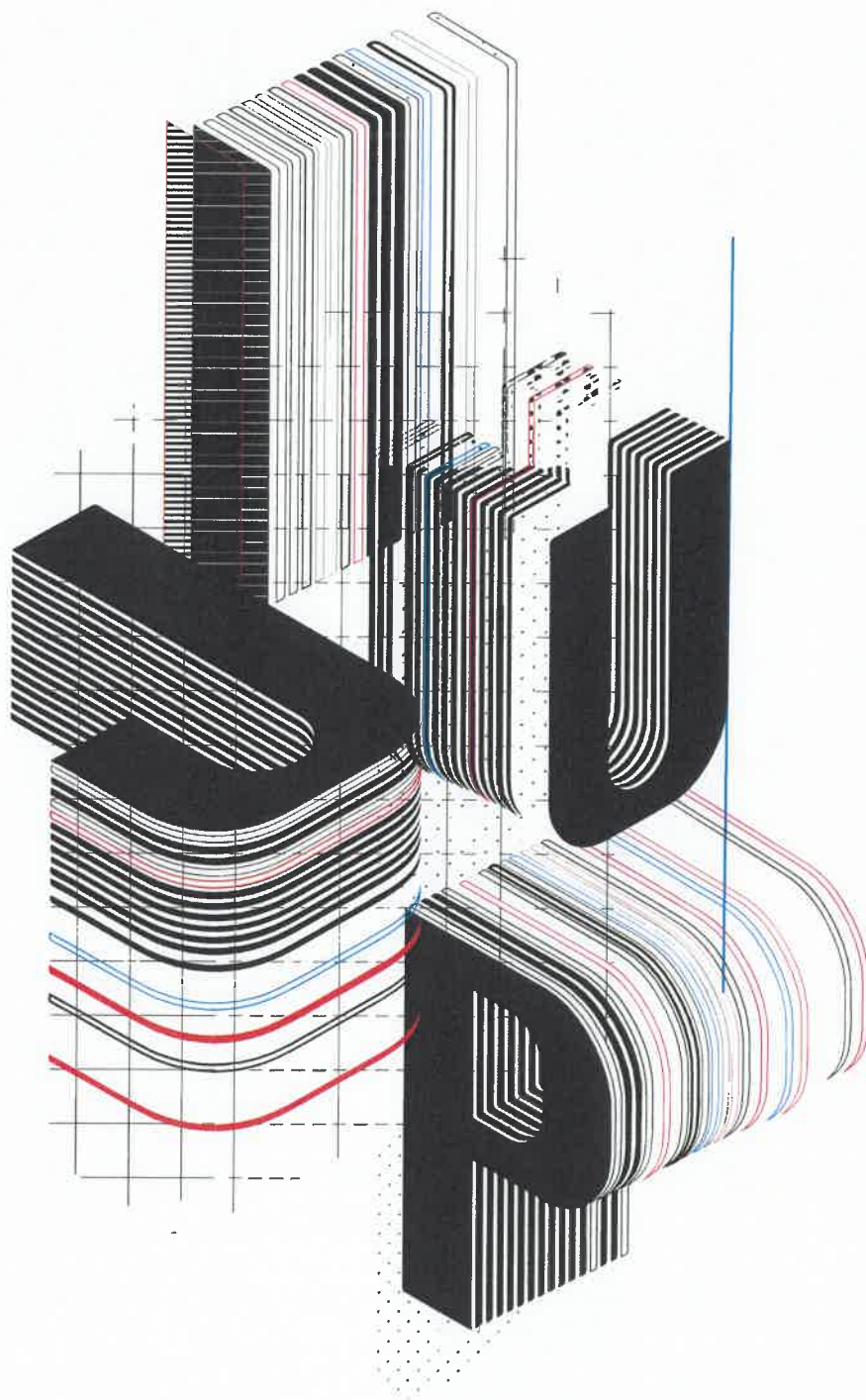


BOOK OF ABSTRACTS

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- 15281 | *Opuntia ficus-indica* (L.) Miller fruit from Portugal: alternative crops and food security

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The search for plant species to develop sustainable agriculture is nowadays a challenge. *Opuntias* (Cactus), once invasive species, are now part of the natural landscape and the agricultural systems of many regions [1]. *Opuntia* products (palm, flowers and fruits) are used for food, forage, energy, folk medicine, cosmetic and agronomic purposes, contributing to the food security.

For those reasons, in this study it was evaluated the nutritional composition of *Opuntia* fruits cultivated and provided by a local producer in Torres Novas (Portugal). Samples were divided according to their inherent colour (red, yellow and green).

The three fruits showed interesting nutritional profiles, determined by AOAC methods [2].

In general, the fruits presented low fat content, being observed a greater value for the red figs (1.5 g/100 g dw). Total protein content ranged between 4.9 and 6.4 g/100 g dw in yellow and red, respectively. In turn, the yellow fruit contained higher levels of total minerals (4.19 g/100 g dw), while the green fruit were the richest in total dietary fiber (29.6 g/100 g dw).

These results could be relevant to better understanding the nutritional composition of these fruits, and promote its valorization as well as further applications.

References:

[1] Ross T. Shackleton; Arne B. R. Witt; Francis M. Piroris; Brian W. van Wilgen. 2017. Distribution and socio-ecological impacts of the invasive alien cactus *Opuntia stricta* in eastern Africa. *Biol Invasions*, 19:2427-2441.

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