

# Review of: "Acacia Pycnantha Gum Exudates Recognised As a Traditional Food in Two Countries May Have Economic Potential"

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Potential competing interests: No potential competing interests to declare.

## **\*\*GENERAL:**

- The topic is interesting and seems promising, but it's unclear:

What is the objective of this research?

What is the relevance of the research for society and the scientific community?

What contribution does the research make to the study area in which it is being developed?

What is the significance of collecting the gum if no laboratory analysis was performed on this material?

## ABSTRACT:

- Correct the repeated information in the abstract about "in the southern regions of Australia, particularly South Australia."

- Rewrite the abstract by briefly contextualizing the topic, study objectives, methodology used, main results, and conclusions found in the research.

- Reduce the number of keywords to 3 or a maximum of 5 (suggestions: *Acacia pycnantha*, gum arabic, gastroesophageal reflux).

## INTRODUCTION:

- Positive aspects: The topic presentation was concise, well-contextualized, and theoretically grounded.

- Areas for improvement: The introduction lacks the research problem, general study objective, research relevance/justification, contributions, and a brief literature review.

## MATERIALS AND METHODS:

- In the abstract, the author states that each tree produces about 10g of gum per year. However, in the materials and methods section, the author reports collecting pieces of up to 30g of gum from the trees. These conflicting pieces of information raise doubts for the reader. One of them needs revision to include the correct information.

- The symbol  $\approx$  can be replaced with the word "approximately," which fits better in the text.
- The following information would be better placed in the introduction: "Pieces of 5 to 10g can be sucked like a soothing, mild-flavored tablet. Traditionally, they could also be boiled [11]. Gum pieces should not be chewed as their adhesive nature may dislodge dental fillings."

During winter, rain washes away the water-soluble gum exposed on the trunk and branches, removing all traces except when located under branches and kept dry. The gum that remains on the tree for months is still edible but becomes hard and challenging to remove.

In 2022, a request was made to Food Standards Australia and New Zealand to recognize AP gum as a traditional food, resulting in the group's opinion that AP gum would receive traditional food status due to its historical use in Australia, for consumption of up to 30g per day [12]. These are likely the only two countries in the world that allow the sale of AP gum as food for human consumption and may suggest its safety for sale in other countries for non-food uses, such as adhesives or other uses, including for GA [1] [12].

- The methodology should include: details about the object of study, the location, and the period when the work was conducted. If it's a field study, also describe relevant physical and biological characteristics of the research site and provide geographical coordinates.
- There's a lack of description of different research procedures or stages (What experiments were conducted? Were there laboratory analyses and data analysis?)
- Describe the equipment or materials used (e.g., model, supplier, city, country of manufacture).