

## Chapter 62

# The Nutritional and Health Potential of Blackjack (Bidens pilosa L.): A Review – Promoting the Use of Blackjack for Food

Rose Mujila Mboya

*Independent Researcher, Pietermaritzburg, South Africa*

### ABSTRACT

*Blackjack (bidens pilosa L.) grows naturally as a perennial herb across the world, especially in tropical regions, and it is used in many parts of the world for treating illnesses such as diarrhea, indigestion, wounds, and respiratory infections. Blackjack's agricultural and pharmaceutical benefits have been well studied by scientists, following which several suggestions for using it as a source of supplements and alternative antibiotics have been made. Moreover, blackjack is edible but very much underutilized for food purposes. In this article, the author reviews the advantages and disadvantages of blackjack and argues for the deliberation of promoting its use for food.*

### INTRODUCTION

Blackjack (*Bidens pilosa* L.) is a widespread plant said to have its origin in tropical America. It is currently recognized as an invasive weed and a threat to natural vegetation in many countries (Arthur, Naidoo & Coopooosamy 2012), requiring serious preventative measures. It is therefore mostly destroyed and wasted. However, blackjack is well recognized for its curative characteristics in many parts of the world, thus used to treat illnesses such as respiratory infections, wounds, dysentery, diarrhoea and indigestion (Arthur et al., 2012). It is also consumed in some parts of the world, especially when other vegetables are scarce (Lusweti, Wabuyele, Ssegawa & Mauremootoo, 2011). In general, blackjack is greatly underutilized as a food source. It's occurrence as a weed or wild plant would naturally create negative perceptions with

DOI: 10.4018/978-1-7998-5354-1.ch062

## ***The Nutritional and Health Potential of Blackjack (Bidens pilosa L.)***

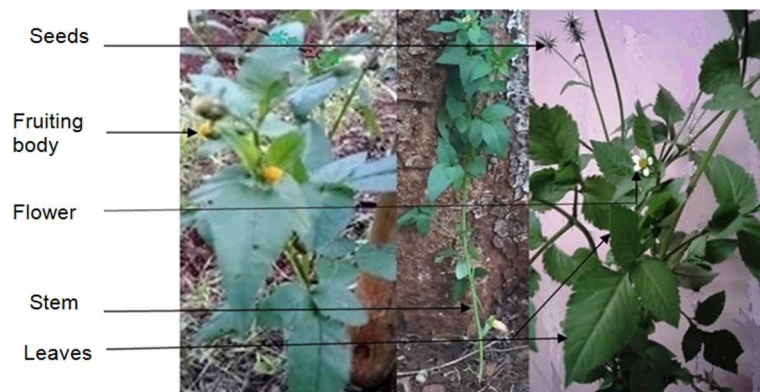
regard to its consumption regardless of its benefits. The fact that it is consumed in some communities only when other vegetables are scarce implies that blackjack is not a preferred food.

Although its nutritional benefits have been studied, they have not been reported as much as its pharmaceutical and agricultural benefits. Considering the minimal labour required to grow blackjack together with its potentially significant nutritional benefits, in this paper, the author argues for the domestication of the blackjack plant and the deliberation of its use for food. The main objective for this paper was to review the advantages and disadvantages of blackjack and argue for its promotion for use as food based on its nutritional benefits and its potential for combating micronutrient deficiencies and chronic diseases.

## **BACKGROUND**

Blackjack (Figure 1) falls under the following taxonomic tree (Bartolome, Villaseñor & Yang, 2013):

*Figure 1. Blackjack (Bidens pilosa L.)*



## **Taxonomic Tree**

**Kingdom:** *Plantae*  
**Subkingdom:** *Tracheobionta*  
**Phylum:** *Spermatophyta*  
**Subphylum:** *Angiospermae*  
**Class:** *Magnoliopsida*  
**Order:** *Asterales*  
**Family:** *Asteraceae*  
**Genus:** *Bidens*  
**Species:** *Bidens pilosa*

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/the-nutritional-and-health-potential-of-blackjack-bidens-pilosa-l/268195](http://www.igi-global.com/chapter/the-nutritional-and-health-potential-of-blackjack-bidens-pilosa-l/268195)

## Related Content

---

### Farm Security for Food Security: Dealing with Farm theft in the Caribbean Region

Wendy-Ann Isaac, Wayne Ganpatand Michael Joseph (2021). *Research Anthology on Food Waste Reduction and Alternative Diets for Food and Nutrition Security* (pp. 972-991).

[www.irma-international.org/chapter/farm-security-for-food-security/268181](http://www.irma-international.org/chapter/farm-security-for-food-security/268181)

### Health-Improving and Disease-Preventing Potential of Camel Milk Against Chronic Diseases and Autism: Camel Milk and Chronic Diseases

Mo'ez Al-Islam Ezzat Farisand Hadeel Ghazzawi (2020). *Handbook of Research on Health and Environmental Benefits of Camel Products* (pp. 155-184).

[www.irma-international.org/chapter/health-improving-and-disease-preventing-potential-of-camel-milk-against-chronic-diseases-and-autism/244739](http://www.irma-international.org/chapter/health-improving-and-disease-preventing-potential-of-camel-milk-against-chronic-diseases-and-autism/244739)

### Microbial Aspect of Lactic Acid Bacteria Isolated From Camel Milk

Dasel Wambua Mulwa Kaindiand Patrick Murigu Kamau Njage (2020). *Handbook of Research on Health and Environmental Benefits of Camel Products* (pp. 54-74).

[www.irma-international.org/chapter/microbial-aspect-of-lactic-acid-bacteria-isolated-from-camel-milk/244735](http://www.irma-international.org/chapter/microbial-aspect-of-lactic-acid-bacteria-isolated-from-camel-milk/244735)

### Manufacture of Dairy and Non-Dairy Camel Milk Products

Nour Amin Elsayhoriand Hiba Fathi Al-Sayyed (2020). *Handbook of Research on Health and Environmental Benefits of Camel Products* (pp. 75-109).

[www.irma-international.org/chapter/manufacture-of-dairy-and-non-dairy-camel-milk-products/244736](http://www.irma-international.org/chapter/manufacture-of-dairy-and-non-dairy-camel-milk-products/244736)

### Potential Anti-Diabetic Effect of Camel Milk

Rajendra Prasad Agrawal, Ritvik Agrawal, Mo'ez Al-Islam Ezzat Farisand Hadeel Ali Ghazzawi (2020). *Handbook of Research on Health and Environmental Benefits of Camel Products* (pp. 185-196).

[www.irma-international.org/chapter/potential-anti-diabetic-effect-of-camel-milk/244740](http://www.irma-international.org/chapter/potential-anti-diabetic-effect-of-camel-milk/244740)