

# Potential of Shoots from “Katak” For Shoot Apical Meristem Culture on *Amorphophallus Konjac*

Totik Sri Mariani<sup>1</sup>, Ahmad Sjahrian S<sup>1</sup> and Tet Fatt C<sup>2</sup>

<sup>1</sup>Bandung Institute of Technology, Bandung, Indonesia

<sup>2</sup>Tet Fatt Chia Impact Capital, Singapore

Submission: June 25, 2024; Published: July 04, 2024

\*Corresponding author: Totik Sri Mariani, Bandung Institute of Technology, Bandung, Indonesia

**Keywords:** Amorphophallus Konjac; Katak; Mass clonal propagation; TDZ solution; Shoot apical meristem

## Opinion

*Amorphophallus konjac* is an herbaceous evergreen perennial plant with edible corms that contain two important reserve polysaccharides, starch and glucomannan [1]. It has many industries derived from polysaccharides of *A. konjac*. Therefore, we have to prepare the plantation of *A. konjac* by means of shoot apical meristem culture.

“Katak” (bulbil) of *A. konjac* is brown nodule that growing on the leaf of *A. konjac* so we can call it bulbil of leaf [2]. Figure 1 shows “katak” (bulbil) of *A. konjac* after detaching of leaf. With

BAP (Benzyl Amino Purine) and TDZ (Thidiazuron), the “katak” will produce hundreds of multiple shoots which can be used for mass clonal propagation. The concentration of BAP is 50 mg/l and TDZ is 2 mg/l. The mix of BAP and TDZ solution was dropped on the surface of apical shoot. Figure 2 shows the “katak” forming many shoots. They look healthy and can be used to produce mass clonal propagation of the *A. konjac*.

In my opinion, shoots from “katak” can be used for explants of shoot apical meristem of *A. konjac*.



**Figure 1:** Shows “katak” (bulbil) of *A. konjac* after detaching of leaf



Figure 2: Shows the "katak" forming many shoots.

## References

1. Mariani TS, Rosydiati, Brisibe EA (2024) Clonally propagated foot\_yam (*Amorphophallus Konjac*) and its potential utility for sustainable production of Konjac glucomannan. *JOJ Hortic Arboric* 4(3): 555637.
2. Kamil MT (2021) Tanaman Porang Menjadi Primadona Ekspor, Katak Porang Pulau Alor Semakin Diburu. *Berita*.



This work is licensed under Creative Commons Attribution 4.0 License  
DOI: [10.19080/JOJHA.2024.03.555643](https://doi.org/10.19080/JOJHA.2024.03.555643)

**Your next submission with Juniper Publishers  
will reach you the below assets**

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats  
( Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission  
<https://juniperpublishers.com/online-submission.php>