

Utilisation of waste *Agaricus bisporus* and *Torreya grandis* as potential natural additive coating in *Agaricus bisporus* preservation

HAINING ZHUANG¹, MOYAO YANG², TAO FENG^{2*}, WENFENG DING³,
LINGEN CHEN³, YONGJIN QIAO⁴, DA CHEN⁵, WEI JIA⁶, JINGSONG ZHANG⁶

¹School of Health & Society Care, Shanghai Urban Construction Vocational College, Shanghai, China

²School of Perfume and Aroma Technology, Shanghai Institution of Technology, Shanghai, China

³Shanghai Lianzhong Edible Fungi Cooperative Company, Shanghai, China

⁴Agricultural Products Storage and Processing Research Centre,
Shanghai Academy of Agricultural Science, Shanghai, China

⁵Department of Animal, Veterinary and Food Sciences, College of Agricultural and Life Sciences,
University of Idaho, Moscow, USA

⁶Institute of Edible Fungi, Shanghai Academy of Agricultural Sciences, Shanghai, China

*Corresponding author: fengtao@sit.edu.cn

Citation: Zhuang H.N., Yang M.Y., Feng T., Ding W.F., Chen L., Qiao Y.J., Chen D., Jia W., Zhang J.S. (2022): Utilisation of waste *Agaricus bisporus* and *Torreya grandis* as potential natural additive coating in *Agaricus bisporus* preservation. Czech J. Food Sci., 40: 195–201.

The authors are fully responsible for both the content and the formal aspects of the electronic supplementary material. No editorial adjustments were made.

Electronic supplementary material

Supplementary Figures S1–S2

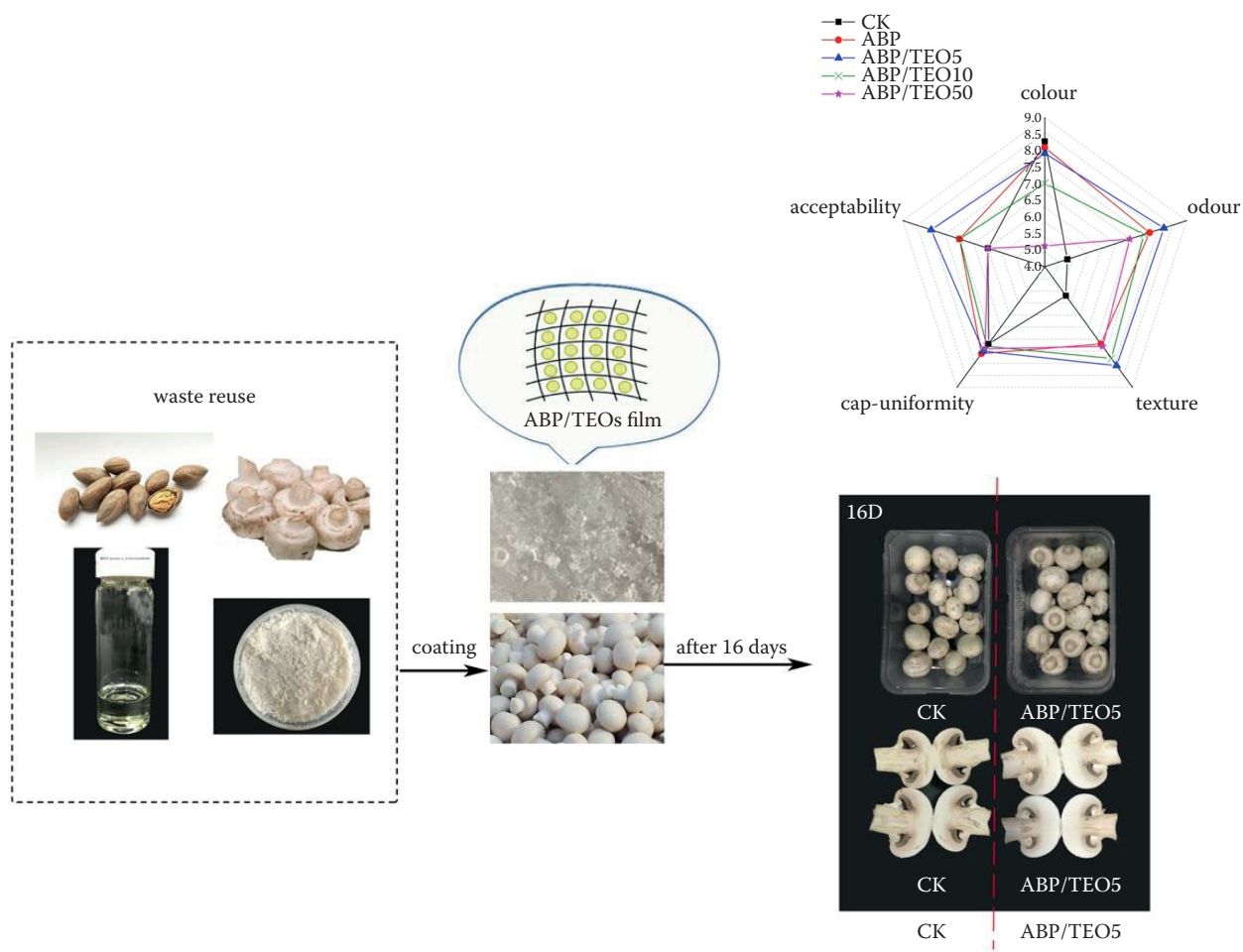
<https://doi.org/10.17221/91/2020-CJFS>


Figure S1. Technology roadmap of button mushroom preservation

CK – control; ABP – *Agaricus bisporus* polysaccharides; ABP/TEO5 – 0.5% ABP + 1.0% sorbitol + 500 ppm *Torreya grandis* essential oils (TEO); ABP/TEO10 – 0.5% ABP + 1.0% sorbitol + 1 000 ppm TEO; ABP/TEO50 – 0.5% ABP + 1.0% sorbitol + 5 000 ppm TEO

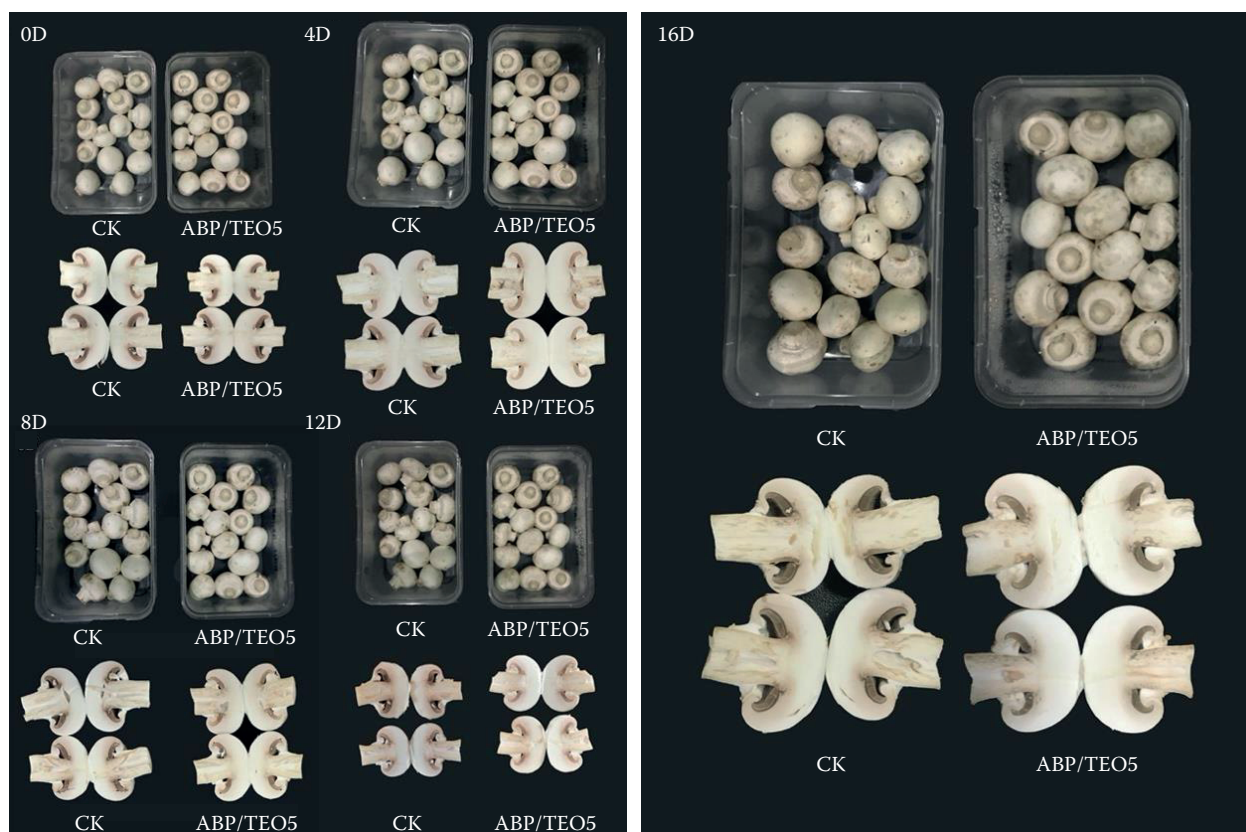


Figure S2. Images of fresh-keeping button mushroom samples during different storage periods (differences in colour among different treatments are obvious from inner sections of mushroom samples)

CK – control; ABP/TEO5 – 0.5% *Agaricus bisporus* polysaccharides (ABP) + 1.0% sorbitol + 500 ppm *Torreya grandis* essential oils (TEO)