ABSTRACT

Soy sauce is a popular condiment in Asian countries made from fermented soybeans. The production process of traditional soy sauce usually takes place in a non-sterile environment, causing spontaneous fermentation by indigenous microorganisms. One of the commonly found and reported species in soybean-based fermented food was *Bacillus subtilis*. Although *Bacillus* is generally recognized as safe (GRAS) by The United States Food and Drug Administration (FDA), there are *Bacillus* strains that cause detrimental health effects. Some studies have managed to isolate various microorganisms that play a role in soy sauce production, including *Bacillus* spp. However, there has not been any studies that summarize and compile the role and advantages of *B. subtilis* in soy sauce production. Therefore, this review aims to address the role *B. subtilis* has during soy sauce fermentation and assess the safety aspects of *B. subtilis* strains that have been previously reported. The author managed to highlight the role of *B. subtilis* based on its metabolites and how it affects soy sauce fermentation and the final product.

Keywords: soy sauce production; *Bacillus subtilis*; soy sauce fermentation; biogenic amine; antimicrobial properties