## **Optimization of Soluble Organic Selenium Accumulation during Fermentation of** *Flammulina velutipes* Mycelia

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Selenium is an essential nutrient with diverse physiological functions, and soluble organic selenium (SOS) sources have a higher bioavailability than inorganic selenium sources. Based on the response surface methodology and central composite design, this study presents the optimal medium components for SOS accumulation in batch cultures of *Flammulina velutipes*, *i.e.* 30 g/L glucose, 11.2 mg/L sodium selenite, and 1.85 g/L NH<sub>4</sub>NO<sub>3</sub>. Furthermore, logistic function model feeding was found to be the optimal feeding strategy for SOS accumulation during *Flammulina velutipes* mycelia fermentation, where the maximum SOS accumulation reached (4.63  $\partial$  0.24) mg/L, which is consistent with the predicted value.

Key words: Feeding Strategy, Flammulina velutipes, Soluble Organic Selenium