

## ABSTRACT

Aquaculture has been ranked as one of the fastest-growing food sub-sectors, providing quality protein to better the livelihoods of rural communities alongside curbing malnutrition and food security globally. Nonetheless, the industry's sustainability has been threatened by the high cost of fish feeds, which account for approximately 60–70% of the total operational costs. Fish meal (FM) has been extensively utilised as the main source of protein in the diets of farmed finfishes. However, due to declining capture fisheries and competing uses from other animal feed producers, the ingredient has become a scarce resource with limited availability and high prices. Black soldier fly larvae (BSFL) have been identified as a promising alternative protein source in fish feeds. BSFL are documented to have high nutritional content: crude protein (of up to 64% dry matter), essential amino acids, fatty acids, and other micro-nutrients which are vital for the growth of fish. BSFL meal has the potential success of replacing FM in the diets of various fish species. This chapter focuses on analysing recent research work in BSFL proximate and chemical composition, its current utilisation in fish feeds and gaps to be filled in its complete utilisation as an ingredient in commercial feed production. This information is expected to help both cottage and commercial fish feed producers utilise BSFL in feed production in Kenya and further will promote the sustainability of the aquaculture industry.