## Study on the correlation between different black pig body conformation and auction prices in Taiwan hog auction market

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Most of the sales methods of pigs in Taiwan are live auctions. When the pigs reach the listed weight, they are transported to the auction market at an auction sale, the buyer will evaluate the quality of the auctioned pigs on the spot, and immediately make an auction price for the pigs. In Taiwan, black-haired pigs (black pigs) account for about 13% of all meat pigs, and the auction unit price in the market is generally higher than that of whitehaired pigs (LYD or LD pigs). Previous research have shown that black pigs could been divided into three types: meat type, bacon type and lard type according to their appearance and body conformation in auction market. The purpose of this study was to investigate and analyze the correlation between different black pig body conformation and auction prices in Taiwan auction market (hog-market). The experiment randomly collected3,546auction weights and auction data of black pigs on eleven auction days. For the collected data, a preliminary analysis of the body conformation and size, and price of the black pigs was been conducted, among which the meat type, and the bacon type accounted for 33.64%, 66.36%, and the lard type was not observed, respectively. The results showed that the auction weight of bacon type was significantly higher than that of meat type (p < 0.05). The auction weight of bacon type and meat type were 146.08±17.99and 128.78±12.63 kg, respectively. After the auction price of black-haired pigs was been corrected with the average price of black-haired pigs (on that day), the unit price of bacon type was 0.32%higher than the average auction price (p < 0.05). The unit price of meat type is 0.64% lower than the average auction price (p < 0.05). The results show that black pigs of bacon type were more preferred by buyer than meat type during the auction process in the hog auction market. It means that consumers may prefer black pigs with a higher proportion of fat in Taiwan.

Key words: Black hogs, Body conformation, Auction price, Auction market