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# Characteristics as Fertilizer of Feces of Aigamo Ducks for Rice Plant (*Oryza sativa* L.)

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**Abstract:** To clarify the characteristics of aigamo duck feces as fertilizer, we analyzed the inorganic components of aigamo duck feces, and examined the correlation of the amount of ammonium nitrogen in soil with the growth and yield of rice, when aigamo duck feces were applied. One gram of air-dried feces contained 26.6mg of total nitrogen. The amount of total nitrogen excreted in feces increased in the period from late June to early July, and remained at the range of about 0.5 g per day after early July. When aigamo duck feces were applied without basal fertilizer, ammonium nitrogen in the soil increased during the late growth stage of rice, but the yield and protein content of brown rice were not. This suggests that the amount of nitrogen supplied from the feces of aigamo ducks is a minor part of nitrogen taken up by rice. It is probably difficult to obtain a sufficient yield of brown rice in the aigamo duck farming system, without nutritional nitrogen supply.

**Keywords:** Aigamo duck farming system, Aigamo feces, Ammonium nitrogen, Protein content of brown rice, Rice (*Oryza sativa* L.)

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