## Sistem Pakar Seleksi Kesiapan Bertelur Pada Ayam Ras Menggunakan Metode Certainty Factor (Expert System for Egg Laying Readiness Selection in Chicken Using the Certainty Factor Method)

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## ABSTRACT

Eggs are a great source of animal protein, which taste delicious, are easy to digest, and are highly nutritious. Eggs can be used as a side dish, a mixture of various foods, egg flour, medicine, and so on. The total production of eggs of broilers in Indonesia in 2017 was 1,506.2 tons and an increase of only 1.38% from the total production in 2016 of 1,485.7 tons, smaller than the increase in the production of other eggs. Selection of chickens is very important in all farms, because with selection we get chickens that are uniform in terms of performance. Therefore, to simplify and assist breeders in selecting the readiness to lay eggs of broilers, it is necessary to create a system that can assist in the selection process, namely an expert system for selection of egg laying readiness in broilers. This system aims to determine the readiness of broilers and the treatment that must be done by breeders, so that the productivity of the eggs produced can be obtained optimally. The method used in the expert system of egg laying readiness selection in broilers is the Certainty Factor method. Blacbox testing is carried out to produce a system that can run according to the needs and expected scenarios. The UAT (User Acceptance Testing) test carried out on the system obtained an average percentage of 79.1%, then for the validation test the comparison between the system and the expert produced a percentage of 80%.

Key words: certainty factor, expert system, selection