

UJI FERTILITAS TELUR BERDASARKAN JUMLAH EMBRIO MENGGUNAKAN DETEKSI KONTUR

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ABSTRACT

One of ways to increase the success of hatching eggs is to select and separate the embryonated eggs (fertility) with eggs that are not embryonated (infertility) by conducting an observation (candling). With this system, it is expected to increase hatching results. This system utilizes a flashlight or lamp as a medium so that the internal condition of the eggs can be seen and then taken a picture by the webcam. After that, the digital image processing is carried out by converting the original image to binary image by giving a value of Thresholding (T), the value of T is very influential in the image processing. Furthermore, opening and closing, thinning of the image with the zhang suen mode, and calculation of the number of embryos detected uses the contour detection method. The number of embryos is useful as a parameter for determining the final results. From the experiments carried out takes an average of 15 seconds on each egg identified. And then on the percentage of compatibility between condition of the original eggs with the results obtained in the system that is 88.88% in determining the category results (fertility / infertility) with an error of 11.12%. For suitability, the estimated percentage of hatchlings themselves have a success of 61.11% with an error of 38.89%. These results are influenced by many factors both the condition of the egg itself and the supporting devices in the system.

Keywords : fertile, infertile, candling, thresholding, contour.