



The significance of sexing in bird species

Estimated reading time: 8 minute(s)

Sexing in birds is a difficult exercise, as male and female a day old hatchlings look similar and one cannot tell them apart.

Accuracy in sex identification in birds is vital for [management](#), conservation and development of a population especially among captive breeding systems (Morinha et al., 2012).

Furthermore, bird species that are nearly extinct are preserved and bred specifically to suppress inbreeding or mating closely related birds.

[Bird farmers](#) or keepers are faced with a serious challenge of separating different sexes at hatching. Also, the reproductive organs are inside the body cavity in male birds, which adds to the complexity.

Today's discussion will focus on some of the **sexing techniques** used in birds: **vent** sexing, **feather** sexing and **molecular** sexing.

What does sexing in birds entail?

Days old hatchling -> Is a male hatchling **OR** Is a female hatchling?

General advantages of sexing:

- Primarily, to know the sex of the new hatchling.
- In order to maximize profits in the broiler industry, broiler production can be carried out based on sex separation. In doing so, [cockerels](#) are raised separately for meat production.



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- Customer demands are met, as it is easy to sell either male or female hatchlings when they are just a day old.

Vent sexing

Venting or **vent sexing** involves holding a hatchling facing downwards using one hand, followed by expelling the fecal material until a bulb like structure is seen in the cloaca.

The presence of a bulb like structure signifies that the new hatchling is male whilst the absence simple entails that the hatchling is female. Venting is a common traditional method to sex male hatchlings from female ones among different bird species.

Trained personnel often do venting in birds.

Species include:

- Turkey, doves, pigeons and chickens

Advantage

- Common traditional method

Disadvantage

- Cumbersome exercise
- High chances of mistaking a female hatchling from a male one

Molecular sexing

Molecular geneticists are able to determine the sex bird species



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using a technique called Polymerase chain reaction-Agarose gel electrophoresis.

Whereby, a day old hatchling's feathers are used to extract Deoxyribonucleic acid (DNA). Unlike humans, females are heterogametic (ZW) whereas males are homogametic (ZZ).

The preservation of captive species can be achieved by these laboratory practices.

Advantages of the use of laboratory tools

- Highly efficient
- Highly accurate
- Can be done within a specific time-frame

Disadvantages

- Cost
- Not all farming areas are near laboratories

Feather sexing

Feather sexing is based on the rate of growth of wings in one day old hatchlings.

Long primary feathers are typical of female hatchlings, when compared to the covert feathers; while male hatchlings have short primary feathers in comparison to the coverts.

Advantages



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- Cheaper
- Easy to learn

Disadvantages

- High chances of mistaking a male hatchling with a female one

Note: Let us **farm in style** knowing the sex of the **birds**

Conclusion

In conclusion, the use of laboratory tools in the molecular genetics and physical characterization, and the use of venting and feather sexing in birds, play a vital role in determining the sex of new hatchlings.

References

<https://www.primidi.com/sexing>

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