

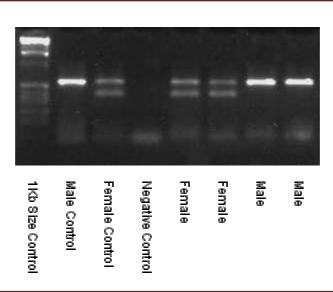
University of Veterinary & Animal Sciences, Lahore-Pakistan Institute of Biochemistry and Biotechnology

Avian DNA Sexing

In the past, phenotypic identification of sex was very difficult in various species of birds causing problems in pairing for breeders and bird lovers. IBBT scientists took this challenge and after an extensive lab work developed molecular markers that could detect gender using DNA information with 99.9% reliability. DNA sexing uses the process PCR to analyze the DNA from the sex chromosomes of each bird. Bird gender can be determined by chromosomes. Females have two different sex chromosomes (called ZW) while males have two of the same sex chromosomes (called ZZ). The gene CHD is found on both the Z and W chromosomes but the size of the gene on the W chromosome is smaller than the gene on the Z chromosome. The PCR process essentially duplicates the CHD gene thousands of times until there is so much DNA that they can actually be photographed on a special instrument. Since the sizes of the two genes are different, males and females are easily identified. A female will have a larger Z-size gene and a smaller size W gene. Males will have only the Z gene.









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Sample Collection

1

- Hold the bird comfortably so that you can access the bird's toe.
- Remove the new sterile needle and prick the bird's toe just above the claw, after a few seconds a visible drop of blood will appear.



2

Collect the blood in collecting tube.



3

• Complete the form given below with all the requested information regarding the birds that are to be sexed.



4

Post the bags/ envelope having blood sample to us.







OWNERS INFORMATION (Please complete all sections)							
DATE:	OWNER	S NAME:					
VET PRACTICE/VETERINARIAN:							
Address:							
					Post Code:		
Tel:			Fax:				
Email:							

MOLECULAR TEST REQUEST FORM

Please print clearly	Please indicate the test you require under TEST CODE and ✓ if you require a certificate (optional)								
MDS REF No. (Office use only)	YOUR REFERENCE (Sample	TEST	anna.	COCT					
	Breed / Species (Must be completed)	Name/Ring No.	CODE	CERT.	COST				
		•		TOTAL					

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