

Prevalence and risk factors of anoestrus and repeat breeding in dairy cows

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INTRODUCTION

- Getting cows conceived after calving is essential for any reproductive management programmes.
- Anoestrus and repeat breeding are two important disorders causing infertility.
- Infertility may cause significant financial losses for small-holder dairy farms.

However, several factors may influence the prevalence of anoestrus and repeat breeding.

Aim

Determine the prevalence of anoestrus and repeat breeding and its influencing risk factors at selected areas of Cumilla district in Bangladesh

METHODOLOGY

Study location and period:

- Dairy farm located at Cumilla sadar and Brammanpara upazila of Cumilla district (Figure 1).
- December 2022 to November 2023.

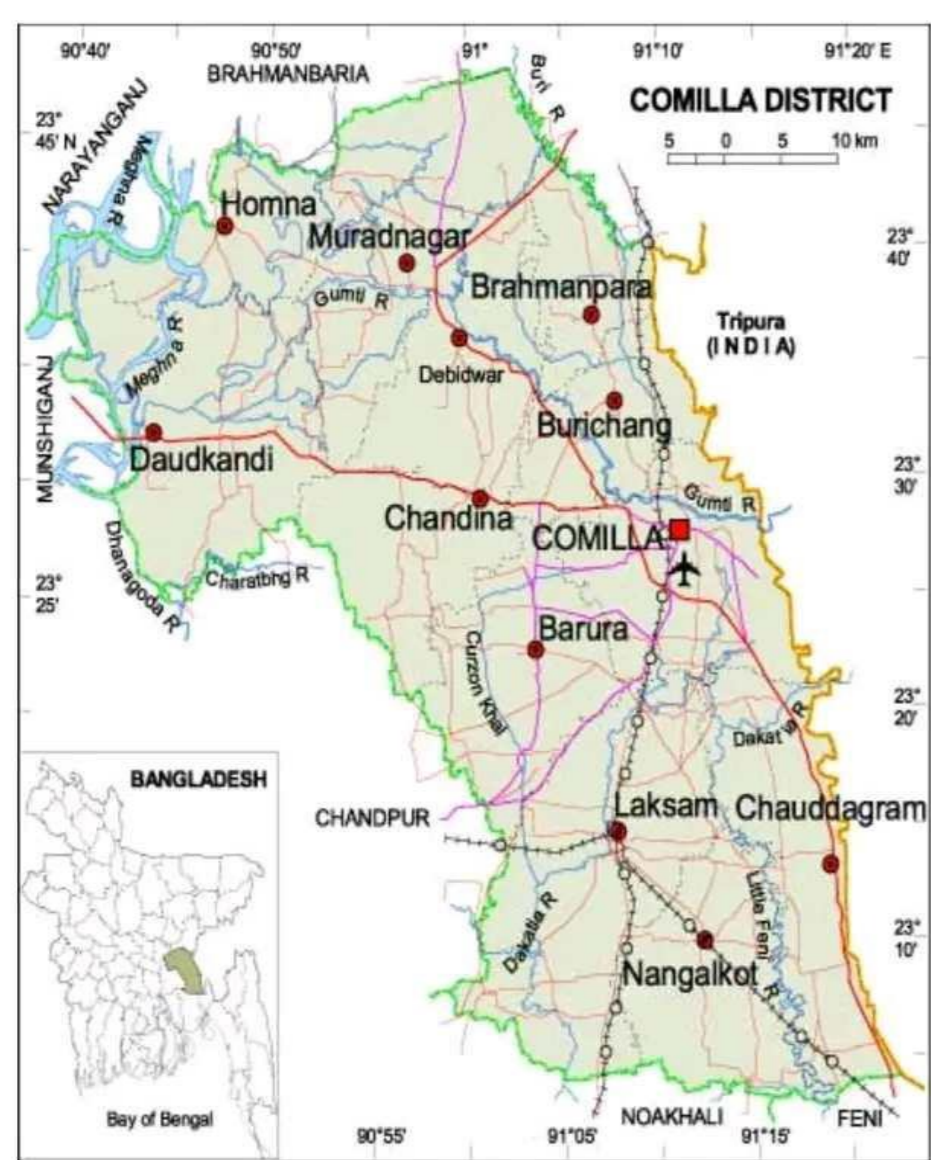


Fig.1: Location of the study

Data: Collected from 321 cows

Variables: Breed, age, number of parity, BCS, milk yield, the occurrence of anoestrus and repeat breeding.

Statistical analysis: Descriptive statistics and Chi square test by SPSS software version 25.

RESULTS

- The highest prevalence of anoestrus (41.7 %) was observed in local cows ($p < 0.05$). In addition, the highest prevalence of repeat breeding (22.7%) was observed in Sahiwal cross ($p < 0.05$) (Table 1).

Table 1. Influence of breed of cows on prevalence of anoestrus and repeat breeding.

Breed of Cows	Number of Cows Examined	Prevalence of Anoestrus (%)	Prevalence of Repeat Breeding (%)
Friesian Cross Cows	260	5.0 (n=13) ^a	6.5 (n=17) ^b
Jersey Cross Cows	27	14.8 (n=4) ^{ac}	3.7 (n=1) ^b
Sahiwal Cross Cows	22	36.4 (n=8) ^{bc}	22.7 (n=5) ^a
Local Cows	12	41.7 (n=5) ^{bc}	8.3 (n=1) ^{ab}

n=number of affected cows.

a,b,c Values with superscripts within same column varied significantly from each other ($p < 0.05$)

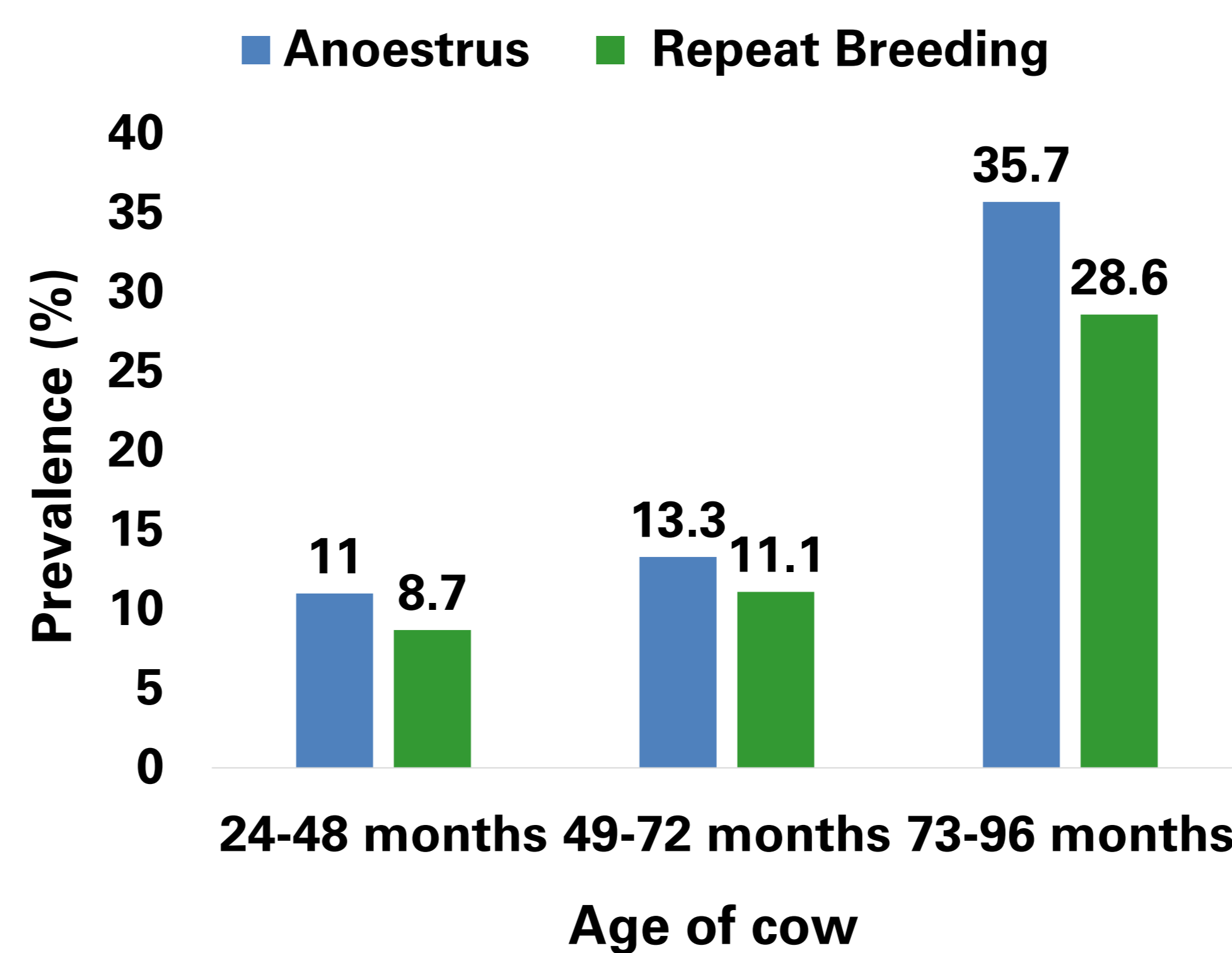


Fig.2 Influence of age of cows on prevalence of anoestrus and repeat breeding.

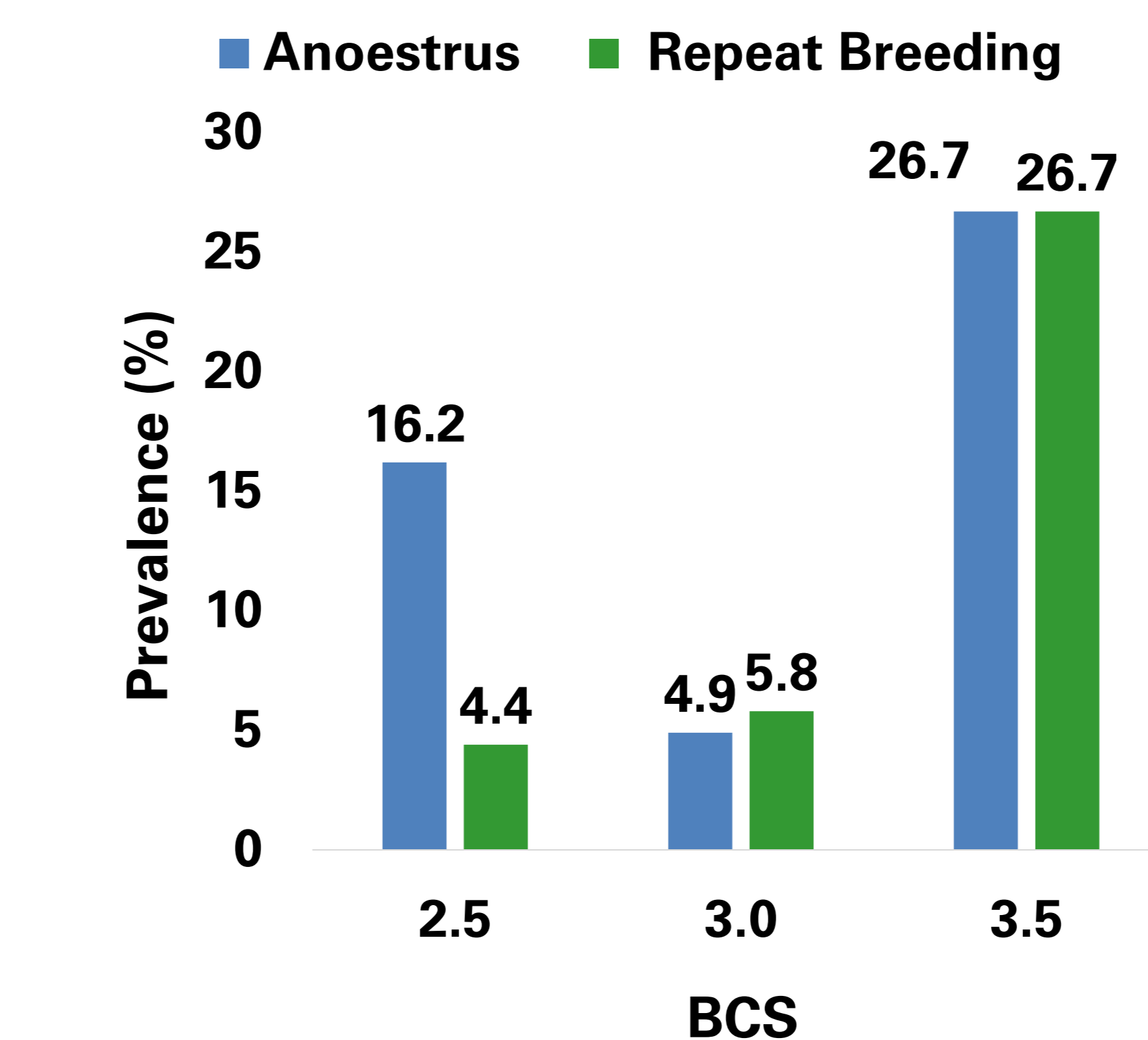


Fig.3 Influence of BCS of cows on prevalence of anoestrus and repeat breeding

CONCLUSIONS

Prevalence of anoestrus and repeat breeding in cows was 9.3% and 7.5% respectively, which may be influenced by breed, age, and BCS at selected areas of Cumilla district in Bangladesh.