DEPARTMENT OF VETERINARY PATHOLOGY, MICROBIOLOGY AND PARASITOLOGY

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Results

❑Overall 100% and 95.8% of the birds in the wet season and dry season respecti
specific antibody titers against NDV (>1:8)

❑Overall, there was a statistically significant higher ($P<0.05$) titer during the wet
65.85) (Table 1) compared to the dry season (GMT 31.08) (Table 2).

❑In the wet season, titers ranging from 1:16 (2^4) to 1:256 (2^8) (Fig 1) while in th
the titer ranging from 1:4 (2^2) to 1:128 (2^7)

❑Chicks and adult birds had a statistically significant higher titer ($P<0.05$) in the
season. For growers, the titers were higher in the dry season, but the difference w
statistically significant.

Table 1:Newcastle disease virus antibody titers in the wet season

	Titer									
Age	Sample size	1:2	1:4	1:8	1:16	1:32	1:64	1:128	1:256	GMT
Chicks	7	-	-	-	1	-	4	1	1	70.66
Growers	8	-	-	-	1	2	4	-	1	53.82
Adults	9	-	-	-	-	1	5	3	-	74.65
TOTAL	**24**	**0**	**0**	**0**	**2**	**3**	**13**	**4**	**2**	**65.85**

Table 2:Newcastle disease virus antibody titers in the dry season

	Titer									
Age	Sample size	1:2	1:4	1:8	1:16	1:32	1:64	1:128	1:256	GMT
Chicks	9	-	1	1	2	4	1	-	-	20.16
Growers	8	-	-	-	2	-	3	3	-	58.69
Adults	7	-	-	2	2	-	2	1	-	26.25
TOTAL	**24**	**0**	**1**	**3**	**6**	**4**	**6**	**4**	**-**	**31.08**

Key
GMT= Geometric mean titer calculates as:

$$G = \sqrt[n]{x_1 x_2 \cdots x_n}.$$

Where G= Geometric mean, n= Number of variables, X= values of the variable

Conclusion

Based on the findings it can be concluded that:

❑In all seasons birds had high titers, the antibodies waned off during the dry season

❑The results are comparable to those of Njagi et al (2010)

❑The presence of antibodies in the chicken indicate endemicity of ND virus in Mbe
district

Recommendations

❑Vaccination is recommended during the start of dry season to maintain high leve
and prevent outbreaks.

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