**A report on**

**Hematological and blood biochemical studies of semi-captive elephants at Dulahazra Safari Park, Cox’s bazar**

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**Hematological and blood biochemical studies of semi-captive elephants at Dulahazra Safari Park, Cox’s bazar**

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**CONTENTS**

|  |  |  |
| --- | --- | --- |
| **Chapter** | **Contents** | **Page No** |
|  | Acknowledgement | i |
|  | Abstract | ii |
| I | Introduction | 01 – 02 |
| II | Review of Literature | 03 – 07 |
| III | Materials and Method | 08 – 09 |
| IV | Result and Discussion | 10 – 14 |
| V | Conclusion | 15 |
| VI | References | 16 – 19 |
|  |  |  |

**LIST OF THE TABLES**

|  |  |  |
| --- | --- | --- |
| Table 1 | Hematological parameters of elephants | 11 |
| Table 2 | Hematological parameters between male and female elephants | 12 |
| Table 3 | Biochemical parameters of elephants | 13 |
| Table 4 | Biochemical parameters between male and female elephants | 14 |

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i

**Abstract**

This study was conducted in semi-captive Asian elephants (*Elephas maximus*) at Dulahazra Safari Park, Cox’s bazaar for a period of 1 month 25th December ’13 to 23th January ’14 to know the existing management systems and haemato-biochemical parameters. Haematological and biochemical parameters were determined following standard procedure. On hemato-biochemical examination, hemoglobin concentration 9.48$\pm $0.576$\%$, packed cell volume 30$\pm $3.80$\%$, erythrocyte sedimentation rate 34.8$\pm $9.20, total erythrocyte count 1.91$\pm $0.30 million/cmm, total leukocyte count 9.77$\pm $5.37 thousand/cmm were nearby similar to normal range. Serum levels of glucose 98.38$\pm $38.321 mg/dl, calcium 20.44$\pm $9.058 mg/dl, potassium 7.76$\pm $0.86 mmol/l, phosphorus 6.56$\pm $0.58mg/dl, chlorine 116.32$\pm $33.82 mmol/l, albumin 6.92$\pm $1.69 g/dl, bilirubin 0.04$\pm $0.05 mg/dl, glutamic pyruvate transaminase 12.68$\pm $3.65U/L, glutamic oxaloacetic transaminase 26.88$\pm $6.77U/L and uric acid 6.56$\pm $7.17 mg/dl were recorded in this study was slightly higher; total protein 7.32$\pm $0.60 g/dl, magnesium 1.3$\pm $0.4 mg/dl were slightly lower than that of normal range. In male ESR, TEC, TLC, neutrophils, monocytes, glucose, total protein, calcium, magnesium, potassium chlorine , bilirubin and uric acid were found higher as compared to female. Further comprehensive study is necessary with large number of study population.

Keywords: Elephant, Hematology, Serum, Biochemistry.

ii