**CHAPTER – III**

**RESULTS**

**Proportionate prevalence of maggot infestation:**

The overall proportionate prevalence of myiasis was 5.52% (N=670) among which 56.76% was in cattle and 43.24% was in goats.

**Myiasis in cattle according to different factors:**

**Table1:** Frequency distribution of myiasis in cattle according to different factors at ***Patiya Upazilla Veterinary Hospital***, Chittagong (*February to April, 2014*)

|  |  |  |
| --- | --- | --- |
| **Variable** | **Category** | **n (%)** |
| Rearing system | Intensive | 8 (50) |
| Semi intensive | 8 (50) |
| Breed | Local  | 3 (18.8) |
| Red Chittagong | 4 (25.0) |
| Cross | 9 (56.2) |
| Age (Year) | ≤ 1  | 10 (62.5) |
| > 1  | 6 (37.5) |
| Sex | Female | 9 (56.3) |
| Male | 7 (43.8) |
| Body condition score | Good | 5 (31.2) |
| Poor | 11 (68.8) |

No difference of myiasis in cattle was observed between rearing systems. Cross breed had higher prevalence of myiasis (56.2%) than local (18.8%) and Red Chittagong (25%).Younger cattle was most commonly affected(62.5%).Again female cattle was frequently affected (56.3%) than male(43.8%).On the other hand, cattle of poor body condition was mostly affected (68.8%) by myiasis (Table 1).

**Myiasis in goats according to different factors:**

**Table 2:** Frequency distribution of myiasis in goats according to different factors at ***Patiya Upazilla Veterinary Hospital***, Chittagong (*February to April, 2014*)

|  |  |  |
| --- | --- | --- |
| **Variable** | **Category** | **n (%)**  |
| Rearing system | Intensive | 10 (47.6) |
| Semi intensive | 11 (52.4) |
| Breed | Black Bengal Goat  | 8 (38.1) |
| Jamunapari  | 11 (52.4) |
| Cross | 2 (9.5) |
| Age (Year) | ≤ 1  | 15 (71.4) |
| > 1  | 6 (28.6) |
| Sex | Female | 11 (52.4) |
| Male | 10 (47.6) |
| Body condition score | Good | 5 (23.8) |
| Poor | 16 (76.2) |

Myiasis was higher in semi intensively reared goat (52.4%) than those goats reared in intensive farming system (47.6%). Cross breed goat shows lowest (9.5%) and Janumapari goats showed highest (52.4%) maggot infestation rate. Younger goats were most commonly affected (71.4%). Again female goats were frequently affected (52.4%) than male (47.6%). On the other hand, Goats of poor body condition were commonly affected (76.2) by myiasis (Table 2).

**Regions involved with Myiasis in cattle and goats:**

  **Table 3:** Frequency distribution of maggot affected regions of cattle

|  |  |
| --- | --- |
| **Affected regions** | **n**  |
| Mouth | 1 |
| Ear | 1 |
| Inguinal region | 1 |
| Tail | 1 |
| Scrotum | 1 |
| Shoulder | 2 |
| Inter digital space | 2 |
| Umbilicus | 2 |
| Vagina | 5 |

 **Table 4:** Frequency distribution of maggot affected regions of goats

|  |  |
| --- | --- |
| **Affected region** | **n** |
| Mouth | 0 |
| Ear | 1 |
| Inguinal region | 2 |
| Inter digital space | 2 |
| Scrotum | 3 |
| Shoulder | 3 |
| Tail | 3 |
| Umbilicus | 3 |
| Vagina | 4 |

Vagina was more frequently affected region for myiasis in cattle (Table 3), where as vagina along with tail, scrotum, umbilicus and shoulder were commonly affected regions for myiasis in goat (Table 4).

**Treatment of myiasis:**

Myiasis was managed by removing of maggots with application of oil of turpentine. In addition a wide range of antimicrobial drugs were used to prevent secondary infection. Doses and duration of used antimicrobial drugs are given below (Table 5&6).

**Table 5:** Frequency distribution of antimicrobial drug prescribed against clinical myiasis of cattle

|  |  |  |  |
| --- | --- | --- | --- |
| **Antibiotics (Group)** | **Trade name (Company name)** | **n** | **Dose and duration** |
| Oxytetracycline (Tetracycline) | Chemysin (Chemist) | 0 | 1ml/10kg/day; 5 days |
| Otetra vet (Square) | 1 | Do |
| Renamycin (Reneta) | 1 | Do |
| Tetra vet (Acme) | 2 | Do |
| Amoxicillin (β Lactam) | Hicomox vet (Opsonin) | 1 | 1gm/100kg/day;5 days |
| Fimox vet (Popular) | 1 | Do |
| Moxacil vet (Square) | 2 | Do |
| Moxillin vet LA (Acme) | 1 | 1ml/10kg/day;5days |
| Penicillin (β Lactam) | Pronapen (Reneta) | 1 | 22,000IU/kg/day;5days |
| Bipen vet (Square) | 3 | Do |
| Vetopen (Opsonin) | 1 | 1ml/10kg/day;5days |
| Ciprofloxacin (Fluroquinolone) | Cipro-A vet (Acme) | 2 | Do |

**Table 6:** Frequency distribution of antimicrobial drug prescribed against clinical myiasis of Goat

|  |  |  |  |
| --- | --- | --- | --- |
| **Antibiotics (Group)** | **Trade name (Company name)** | **n** | **Dose and duration** |
| Oxytetracycline (Tetracycline) | Chemysin (Chemist) | 1 | 1ml/10kg/day; 5 days |
| Otetra vet (Square) | 1 | Do |
| Renamycin (Reneta) | 7 | Do |
| Tetra vet (Acme) | 3 | Do |
| Amoxicillin (β Lactam) | Hicomox vet (Opsonin) | 0 | 1gm/100kg/day;5 days |
| Fimox vet (Popular) | 0 | Do |
| Moxacil vet (Square) | 1 | Do |
| Moxillin vet LA (Acme) | 5 | 1ml/10kg/day;5days |
| Penicillin (β Lactam) | Pronapen (Reneta) | 1 | 22,000IU/kg/day;5days |
| Bipen vet (Square) | 0 | Do |
| Vetopen (Opsonin) | 0 | 1ml/10kg/day;5days |
| Ciprofloxacin (Fluroquinolone) | Cipro-A vet (Acme) | 2 | Do |

Amoxicillin (β Lactam) group of drugs were mostly used in myiasis affected cattle (Table 5) where as Oxytetracycline (Tetracycline) group of drugs were frequently used in case of myiasis affected goat (Table 6).