**Table 1: Comparative efficacy of Albendazole (Helmex-vet®), Fenbendazole (Peraclear®) and Levamisole (Ralnex®) against gastro-intestinal nematodiasis in cattle**

|  |  |  |  |
| --- | --- | --- | --- |
| **Groups** | **Drug with Dose** | **Pre-treatment** | **Post treatment** |
| **EPG at ‘0’ day** | **EPG at 7th day** | **EPG at 14th day** | **EPG at 21st day** | **EPG at 28th day** |
| **Mean ±SE** | **Mean ±SE** | **Mean ±SE** | **Mean ±SE** | **Mean ±SE** |
| A | **Albendazole (Helmex-vet®)** 600 mg/Tab) 7.5 mg/kg b.wt orally | 810 ± 33.17 | 430\*\* ± 20. 00(46.91%) | 220\*\* ± 9.49(72.84%) | 126\*\* ± 9.80(84.44%) | 52\*\* ± 4.90(93.58%) |
| B | **Fenbendazole (Peraclear®)** 250 mg/bolus) 7.5 mg/kg b.wt orally | 720 ± 25.50 | 384\*\*± 14.35(46.67%) | 204\*\* ± 7.48(71.67%) | 120\*\* ± 5.48(83.33%) | 68\*\* ± 3.74(90.56%) |
| C | **Levamisole (Ralnex®)** 708 mg/bolus) 7.5 mg/kg b.wt orally | 824 ± 25.02 | 418\*\* ± 25.38(49.27%) | 224\*\* ± 12.08(72.82%) | 117\*\* ± 3.74(85.80%) | 50\*\* ± 3.16(93.93%) |
| D | Control | 746 ± 20.40 | 772\*\* ± 20.83(3.37%) | 800\*\* ± 18.17(6.75%) | 812\*\* ± 18.28(8.13%) | 826\*\* ± 8.60(9.69%0 |

Within the parenthesis value showing (% increase and decrease)

 The above values represent the mean±SE of 5 cattle

 \*\* = Significant at 1 percent level (p<0.01)

 \* = Significant at 5 percent level (p<0.05)

**Table 2: Comparative efficacy of Albendazole (Helmex-vet®), Fenbendazole (Peraclear®) and Levamisole (Ralnex®) recommended doses on TEC (million/cu.mm.) in cattle**

|  |  |  |  |
| --- | --- | --- | --- |
| **Groups** | **Drug with dose** | **Pre-treatment** | **Post treatment** |
| **TEC at 0 day** | **TEC at 7th day**  | **TEC at 14th day**  | **TEC at 21st day**  | **TEC at 28th day**  |
| **Mean±SE**  | **Mean±SE**  | **Mean±SE**  | **Mean±SE**  | **Mean±SE**  |
| A | **Albendazole (Helmex-vet®)** 600 mg/Tab) 7.5 mg/kg b.wt orally | 5.88 ± 0.10 | 6.34\*\* ± 0.09(7.26%) | 6.74\*\* ± 0.07(12.76%) | 7.08\*\* ± 0.07(16.95%) | 7.44\*\* ± 0.07(20.97%) |
| B | **Fenbendazole (Peraclear®)** 250 mg/bolus) 7.5 mg/kg b.wt orally | 6 ± 0.07 | 6.32\*\* ± 0.08(5.06%) | 6.52\*\* ± 0.10(7.98%) | 6.64\*\* ± 0.10(9.64%) | 6.74\*\* ± 0.10(10.98%) |
| C | **Levamisole (Ralnex®)** 708 mg/bolus) 7.5 mg/kg b.wt orally | 5.82 ± 0.13 | 6.24\*\* ± 0.12(6.73%) | 6.64\*\* ± 0.11(12.35%) | 6.90\*\* ± 0.09(15.65%) | 7.06\*\* ± 0.07(17.56%) |
| D | Control | 5.96 ± 0.05 | 5.94 ± 0.05(0.34%) | 5.88\* ± 0.05(1.34%) | 5.82\* ± 0.04(2.35%) | 5.76 ± 0.05(3.36%) |

Within the parenthesis value showing (% increase and decrease)

 The above values represent the mean±SE of 5 cattle

 \*\* = Significant at 1 percent level (p<0.01)

 \* = Significant at 5 percent level (p<0.05)

**Table 3: Comparative efficacy of Albendazole (Helmex-vet®), Fenbendazole (Peraclear®) and Levamisole (Ralnex®) recommended doses on Hb content (gm%) in cattle**

|  |  |  |  |
| --- | --- | --- | --- |
| **Groups** | **Drug with dose** | **Pre-treatment** | **Post treatment** |
| **Hb at 0 day** | **Hb at 7th day** | **Hb at 14th day** | **Hb at 21st day** | **Hb at 28th day** |
| **Mean ±SE** | **Mean ±SE** | **Mean ±SE** | **Mean ±SE** | **Mean ±SE** |
| A | **Albendazole (Helmex-vet®)** 600 mg/Tab) 7.5 mg/kg b.wt orally | 7.3 ± 0.41 | 7.7\* ± 0.41(5.19%) | 7.9\*\* ± 0.33(7.59%) | 8.4\*\* ± 0.33(13.10%) | 8.7\*\* ± 0.34(16.09%) |
| B | **Fenbendazole (Peraclear®)** 250 mg/bolus) 7.5 mg/kg b.wt orally | 8.1 ± 0.48 | 8.4 ± 0.40(3.57%) | 8.8\*\* ± 0.41(7.95%) | 9.1\*\* ± 0.43(10.99%) | 9.4\*\* ± 0.37(13.83%) |
| C | **Levamisole (Ralnex®)** 708 mg/bolus) 7.5 mg/kg b.wt orally | 8.3 ± 0.46 | 8.6 ± 0.48(3.49%) | 9\*\* ± 0.52(7.78%) | 9.2\*\* ± 0.54(9.78%) | 9.5\*\* ± 0.52(12.63%) |
| D | Control | 7.9 ± 0.51 | 7.7 ± 0.51(2.53%) | 7.5 ± 0.50(5.06%) | 7.2 ± 0.44(8.86%) | 7.0 ± 0.47(11.39%) |

 Within the parenthesis value showing (% increase and decrease)

 The above values represent the mean±SE of 5 cattle

 \*\* = Significant at 1 percent level (p<0.01)

 \* = Significant at 5 percent level (p<0.05)

**Table 4: Comparative efficacy of Albendazole (Helmex-vet®), Fenbendazole (Peraclear®) and Levamisole (Ralnex®) recommended doses on ESR (mm/1st hour) in cattle**

|  |  |  |  |
| --- | --- | --- | --- |
| **Groups** | **Drug with dose** | **Pre-treatment** | **Post treatment** |
| **ESR at 0 day** | **ESR at 7th day** | **ESR at 14th day** | **ESR at 21st day** | **ESR at 28th day** |
| **Mean ±SE** | **Mean ±SE** | **Mean ±SE** | **Mean ±SE** | **Mean ±SE** |
| A | **Albendazole (Helmex-vet®)** 600 mg/Tab) 7.5 mg/kg b.wt orally | 1.08 ± 0.07 | 1.02 ± 0.06(5.56%) | 0.94\*\* ± 0.05(12.96%) | 0.84\*\* ± 0.05(22.22%) | 0.78\*\* ± 0.07(27.78%) |
| B | **Fenbendazole (Peraclear®)** 250 mg/bolus) 7.5 mg/kg b.wt orally | 1.02 ± 0.08 | 0.96 ± 0.06(5.88%) | 0.88\*\* ± 0.06(13.73%) | 0.78\*\* ± 0.06(23.53%) | 0.7\*\* ± 0.07(31.37%) |
| C | **Levamisole (Ralnex®)** 708 mg/bolus) 7.5 mg/kg b.wt orally | 0.98 ± 0.7 | 0.92 ± 0.06(6.12%) | 0.82\*\* ± 0.06(16.33%) | 0.78 ± 0.16(20.41%) | 0.68\*\* ± 0.06(30.61%) |
| D | Control | 1.02 ± 0.06 | 1.02 ± 0.06(0.00%) | 1.04 ± 0.02(1.92%) | 1.1\* ± 0.03(7.27%) | 1.18 ± 0.04(13.56%) |

 Within the parenthesis value showing (% increase and decrease)

 The above values represent the mean±SE of 5 cattle

 \*\* = Significant at 1 percent level (p<0.01)

 \* = Significant at 5 percent level (p<0.05)

**Table 5: Comparative efficacy of Albendazole (Helmex-vet®), Fenbendazole (Peraclear®) and Levamisole (Ralnex®) recommended doses on TLC (thousand/cu.mm.) in cattle**

|  |  |  |  |
| --- | --- | --- | --- |
| **Groups** | **Drug with dose** | **Pre-treatment** | **Post treatment** |
| **TLC at 0 day** | **TLC at 7th day** | **TLC at 14th day** | **TLC at 21st day** | **TLC at 28th day** |
| **Mean ±SE** | **Mean ±SE** | **Mean ±SE** | **Mean ±SE** | **Mean ±SE** |
| A | **Albendazole (Helmex-vet®)** 600 mg/Tab) 7.5 mg/kg b.wt orally | 7.86 ± 0.12 | 7.98\* ± 0.12(1.50%) | 8.04\*\* ± 0.10(2.24%) | 8.08\* ± 0.09(2.72%) | 8.16\*\* ± 0.09(3.68%) |
| B | **Fenbendazole (Peraclear®)** 250 mg/bolus) 7.5 mg/kg b.wt orally | 7.86 ± 0.07 | 7.92 ± 0.07(0.76%) | 7.98\*\* ± 0.06(1.50%) | 8.02\* ± 0.06(2.00%) | 8.04 ± 0.14(2.24%) |
| C | **Levamisole (Ralnex®)** 708 mg/bolus) 7.5 mg/kg b.wt orally | 7.8 ± 0.10 | 7.9\* ± 0.07(1.27%) | 7.98\*\* ± 0.07(2.26%) | 8.04\*\* ± 0.05(2.99%) | 8.1\*\* ± 0.04(3.70%) |
| D | Control | 7.9 2± 0.12 | 7.88 ± 0.11(0.51%) | 7.82\* ± 0.11(1.26%) | 7.78 ± 0.07(1.77%) | 7.76 ± 0.07(2.02%) |

Within the parenthesis value showing (% increase and decrease)

 The above values represent the mean±SE of 5 cattle

 \*\* = Significant at 1 percent level (p<0.01)

 \* = Significant at 5 percent level (p<0.05)

**Table 6: Comparative efficacy of Albendazole (Helmex-vet®), Fenbendazole (Peraclear®) and Levamisole (Ralnex®) recommended doses on PCV (%) in cattle**

|  |  |  |  |
| --- | --- | --- | --- |
| **Groups** | **Drug with dose** | **Pre-treatment** | **Post treatment** |
| **PCV at 0 day** | **PCV at 7th day** | **PCV at 14th day** | **PCV at 21st day** | **PCV at 28th day** |
| **Mean ±SE** | **Mean ±SE** | **Mean ±SE** | **Mean ±SE** | **Mean ±SE** |
| A | **Albendazole (Helmex-vet®)** 600 mg/Tab) 7.5 mg/kg b.wt orally | 32.4 ± 0.58 | 32.7 ± 0.49(0.92%) | 32.2\* ± 0.43(2.41%) | 33.6\*\* ± 0.48(3.57%) | 33.9\*\* ± 0.43(4.42%) |
| B | **Fenbendazole (Peraclear®)** 250 mg/bolus) 7.5 mg/kg b.wt orally | 32.8 ± 0.41 | 33.1 ± 0.43(0.91%) | 33.6\*\* ± 0.43(2.38%) | 34.2\*\* ± 0..37(4.09%) | 34.7\*\* ± 0.37(5.48%) |
| C | **Levamisole (Ralnex®)** 708 mg/bolus) 7.5 mg/kg b.wt orally | 32.1 ± 0.53 | 32.5\* ± 0.50(1.23%) | 32.9\*\* ± 0.53(2.43%) | 33.1\*\* ± 0.43(3.02%) | 33.7\*\* ± 0.44(4.75%) |
| D | Control | 32.4 ± 0.44 | 32.1 ± 0.29(0.93%) | 31.8\*± 0.34(1.85%) | 31.5\*± 0.27(2.78%) | 31.2 \*± 0.34(3.70%) |

Within the parenthesis value showing (% increase and decrease)

 The above values represent the mean±SE of 5 cattle

 \*\* = Significant at 1 percent level (p<0.01)

 \* = Significant at 5 percent level (p<0.05)



**Figure 1: Efficacy of Albendazole (Helmex-vet®), Fenbendazole (Peraclear®) and Levamisole (Ralnex®) against gastro-intestinal nematodiasis in cattle**



**Figure 2: Efficacy of Albendazole (Helmex-vet®), Fenbendazole (Peraclear®) and Levamisole (Ralnex®) recommended doses on TEC (million/cu.mm.) in cattle**



 **Figure 3: Efficacy of Albendazole (Helmex-vet®), Fenbendazole (Peraclear®) and Levamisole (Ralnex®) recommended doses on Hb estimation (gm %) in cattle**



**Figure 4: Efficacy of Albendazole (Helmex-vet®), Fenbendazole (Peraclear®) and Levamisole (Ralnex®) recommended doses on ESR (mm/1st hour) in cattle**



**Figure 5: Efficacy of Albendazole (Helmex-vet®), Fenbendazole (Peraclear®) and Levamisole (Ralnex®) recommended doses on TLC (thousand/cu.mm.) in cattle**



**Figure 6: Efficacy of Albendazole (Helmex-vet®), Fenbendazole (Peraclear®) and Levamisole (Ralnex®)recommended doses on packed cell volume PCV (%) in cattle**