**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**