

**Table (6). Effect of supplemented dietary Senecioglaucus(SG) powder or extract and ButylatedHydroxy Toluene (BHT) caecum activity of growing rabbits (means  $\pm$  SE).**

| Item*                  | Tested diets                  |                               |                               |                               |                               |                              |                              | Sig. |
|------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|------------------------------|------------------------------|------|
|                        | T <sub>1</sub>                | T <sub>2</sub>                | T <sub>3</sub>                | T <sub>4</sub>                | T <sub>5</sub>                | T <sub>6</sub>               | T <sub>7</sub>               |      |
| Caecum weight, g       | 8.54 $\pm$ 0.87               | 7.07 $\pm$ 0.07               | 7.41 $\pm$ 0.10               | 8.13 $\pm$ 0.07               | 7.91 $\pm$ 0.51               | 10.13 $\pm$ 1.29             | 7.91 $\pm$ 0.51              | NS   |
| Caecum length, cm      | 10.33 $\pm$ 0.93              | 10.00 $\pm$ 0.29              | 10.73 $\pm$ 0.23              | 10.58 $\pm$ 0.8               | 10.10 $\pm$ 0.86              | 11.50 $\pm$ 0.29             | 10.10 $\pm$ 0.86             | NS   |
| Caecum pH              | 7.50 <sup>a</sup> $\pm$ 0.24  | 6.95 <sup>bc</sup> $\pm$ 0.28 | 7.08 <sup>b</sup> $\pm$ 0.29  | 7.26 <sup>ab</sup> $\pm$ 0.65 | 7.07 <sup>b</sup> $\pm$ 0.28  | 6.94 <sup>c</sup> $\pm$ 0.2  | 6.07 <sup>c</sup> $\pm$ 0.28 | *    |
| TVFA(meq/100 ml juice) | 3.08 <sup>ab</sup> $\pm$ 0.05 | 2.24 <sup>c</sup> $\pm$ 0.11  | 2.80 <sup>bc</sup> $\pm$ 0.19 | 3.06 <sup>ab</sup> $\pm$ 0.12 | 3.08 <sup>ab</sup> $\pm$ 0.05 | 4.85 <sup>a</sup> $\pm$ 0.20 | 4.73 <sup>a</sup> $\pm$ 0.41 | *    |

\* (T<sub>1</sub>) (Control positive). (17% CP) ; (T<sub>2</sub>) Basal diet (BD) 14% CP (control negative);(T<sub>3</sub>) Basal diet + 150 ppm BHT; (T<sub>4</sub>) Basal diet + 5g of *Senecio glaucus* powder /kg feed; (T<sub>5</sub>) Basal diet + 10g of *Senecio glaucus* powder /kg feed; (T<sub>6</sub>) Basal diet + 0.5ml of *Senecio glaucus* extract (100 mg/l) ;(T<sub>7</sub>) Basal diet + 1ml of *Senecio glaucus* extract (100 mg/l). \*\*a and b Means within the same row differ significantly; NS =not significant, \*= P< 0.05.

**Table (7): Carcass characteristics of growing rabbits as affected by supplemented dietary *Senecio glaucus* (SG) powder or extract and Butylated Hydroxy Toluene (BHT)(means  $\pm$  SE).**

| Parameter             | Tested diets*                     |                                 |                                    |                                    |                                    |                                   |                                   | Sig. |
|-----------------------|-----------------------------------|---------------------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|------|
|                       | T <sub>1</sub>                    | T <sub>2</sub>                  | T <sub>3</sub>                     | T <sub>4</sub>                     | T <sub>5</sub>                     | T <sub>6</sub>                    | T <sub>7</sub>                    |      |
| Pre-slaughter wt.(g)  | 2228.82 <sup>b</sup> $\pm$ 180.64 | 2357 <sup>ab</sup> $\pm$ 180.64 | 2301.66 <sup>ab</sup> $\pm$ 180.64 | 2556.97 <sup>ab</sup> $\pm$ 180.64 | 2437.58 <sup>ab</sup> $\pm$ 180.64 | 2687.02 <sup>a</sup> $\pm$ 180.64 | 2637.58 <sup>a</sup> $\pm$ 180.64 | *    |
| Blood wt.(g)          | 55.82 <sup>ab</sup> $\pm$ 5.28    | 50.84 <sup>ab</sup> $\pm$ 5.28  | 62.51 <sup>ab</sup> $\pm$ 5.28     | 68.59 <sup>a</sup> $\pm$ 5.28      | 57.97 <sup>ab</sup> $\pm$ 5.28     | 58.88 <sup>ab</sup> $\pm$ 5.28    | 67.97 <sup>a</sup> $\pm$ 5.28     | *    |
| Empty carcass wt.(g)  | 1179.87 <sup>b</sup> $\pm$ 97.9   | 1169 <sup>b</sup> $\pm$ 97.99   | 1394.07 <sup>ab</sup> $\pm$ 97.99  | 1315.17 <sup>ab</sup> $\pm$ 97.99  | 1273.87 <sup>ab</sup> $\pm$ 97.99  | 1374.57 <sup>a</sup> $\pm$ 97.99  | 1373.87 <sup>a</sup> $\pm$ 98.0   | *    |
| Dressing %            | 54.35 $\pm$ 4.36                  | 50.73 $\pm$ 4.36                | 53.38 $\pm$ 4.36                   | 52.86 $\pm$ 4.36                   | 53.37 $\pm$ 4.36                   | 52.31 $\pm$ 4.36                  | 53.37 $\pm$ 4.36                  | NS   |
| Deboning%             | 83.63 $\pm$ 6.38                  | 83.3 $\pm$ 6.38                 | 79.43 $\pm$ 6.38                   | 78.83 $\pm$ 6.38                   | 81.95 $\pm$ 6.38                   | 76.33 $\pm$ 6.38                  | 81.95 $\pm$ 6.38                  | NS   |
| Abdominal fat wt.(g)  | 38.00 <sup>a</sup> $\pm$ 6.81     | 34.13 <sup>a</sup> $\pm$ 6.81   | 29.53 <sup>ab</sup> $\pm$ 6.81     | 25.43 <sup>b</sup> $\pm$ 6.81      | 24.77 <sup>b</sup> $\pm$ 6.81      | 19.93 <sup>c</sup> $\pm$ 6.81     | 19.77 <sup>c</sup> $\pm$ 6.81     | *    |
| Edible giblets wt.(g) | 112.03 <sup>ab</sup> $\pm$ 7.85   | 97.21 <sup>b</sup> $\pm$ 7.85   | 115.00 <sup>ab</sup> $\pm$ 7.85    | 114.59 <sup>ab</sup> $\pm$ 7.85    | 121.98 <sup>a</sup> $\pm$ 7.85     | 123.52 <sup>a</sup> $\pm$ 7.85    | 125.98 <sup>a</sup> $\pm$ 7.85    | *    |
| Liver wt.(g)          | 69.41 $\pm$ 8.31                  | 73.12 $\pm$ 8.31                | 75.00 $\pm$ 8.31                   | 71.77 $\pm$ 8.31                   | 68.98 $\pm$ 8.31                   | 70.80 $\pm$ 8.31                  | 68.98 $\pm$ 8.31                  | NS   |
| Heart wt.(g)          | 7.87 $\pm$ 1.79                   | 7.84 $\pm$ 1.79                 | 8.47 $\pm$ 1.79                    | 8.00 $\pm$ 1.79                    | 8.88 $\pm$ 1.79                    | 8.70 $\pm$ 1.79                   | 8.88 $\pm$ 1.79                   | NS   |
| Kidney wt.(g)         | 18.08 $\pm$ 2.74                  | 17.34 $\pm$ 2.74                | 17.38 $\pm$ 2.74                   | 18.73 $\pm$ 2.74                   | 18.89 $\pm$ 2.74                   | 19.35 $\pm$ 2.74                  | 19.09 $\pm$ 2.74                  | NS   |
| Body length (cm)      | 34.67 $\pm$ 2.14                  | 33.4 $\pm$ 2.14                 | 33.33 $\pm$ 2.14                   | 35.00 $\pm$ 2.14                   | 36.00 $\pm$ 2.14                   | 36.83 $\pm$ 2.14                  | 36.00 $\pm$ 2.14                  | NS   |
| Brest Curriculum(cm)  | 25.67 $\pm$ 3.88                  | 22.33 $\pm$ 3.88                | 23.67 $\pm$ 3.88                   | 24.67 $\pm$ 3.88                   | 24.00 $\pm$ 3.88                   | 25.33 $\pm$ 3.88                  | 24.00 $\pm$ 3.88                  | NS   |
| Leg curriculum(cm)    | 20.17 $\pm$ 3.88                  | 20.00 $\pm$ 3.88                | 20.33 $\pm$ 3.88                   | 21.83 $\pm$ 3.88                   | 20.33 $\pm$ 3.88                   | 21.5 $\pm$ 3.88                   | 23.33 $\pm$ 3.88                  | NS   |
| Spleen wt.(g)         | 1.30 $\pm$ 0.55                   | 1.13 $\pm$ 0.55                 | 1.21 $\pm$ 0.55                    | 1.38 $\pm$ 0.55                    | 1.29 $\pm$ 0.55                    | 1.60 $\pm$ 0.55                   | 1.65 $\pm$ 0.55                   | NS   |

\*(T<sub>1</sub>) (Control positive). (17% CP) ; (T<sub>2</sub>) Basal diet (BD) 14% CP (control negative);(T<sub>3</sub>) Basal diet + 150 ppm BHT; (T<sub>4</sub>) Basal diet + 5g of *Senecio glaucus* powder /kg feed; (T<sub>5</sub>) Basal diet + 10g of *Senecio glaucus* powder /kg feed; (T<sub>6</sub>) Basal diet + 0.5ml of *Senecio glaucus* extract (100 mg/l) ;(T<sub>7</sub>) Basal diet + 1ml of *Senecio glaucus* extract (100 mg/l). \*\*a and b Means within the same row differ significantly; NS =not significant, \*= P<0.05.

**Table (8): Blood plasma constituents of growing NZW rabbits as affected by supplemented dietary *Senecio glaucus* (SG) powder or extract and Butylated Hydroxy Toluene (BHT).**

| Parameter             | Tested diets               |                           |                            |                           |                           |                            |                            | Sig. |
|-----------------------|----------------------------|---------------------------|----------------------------|---------------------------|---------------------------|----------------------------|----------------------------|------|
|                       | T1                         | T2                        | T3                         | T4                        | T5                        | T6                         | T7                         |      |
| Urea (mg/dl)          | 52.08 <sup>b</sup> ±3.27   | 60.88 <sup>a</sup> ±3.27  | 50.27 <sup>b</sup> ±3.27   | 54.16 <sup>b</sup> ±3.27  | 42.69 <sup>c</sup> ±3.27  | 35.77 <sup>d</sup> ±3.27   | 34.17 <sup>d</sup> ±3.27   | *    |
| Albumin (g/dl)        | 3.62 <sup>ab</sup> ±0.27   | 4.79 <sup>a</sup> ±0.27   | 3.65 <sup>ab</sup> ±0.27   | 3.36 <sup>ab</sup> ±0.27  | 2.85 <sup>b</sup> ±0.27   | 2.43 <sup>c</sup> ±0.27    | 2.13 <sup>c</sup> ±0.27    | *    |
| Total protein (mg/dl) | 6.64 <sup>ab</sup> ±0.35   | 7.17 <sup>a</sup> ±0.35   | 6.12 <sup>b</sup> ±0.35    | 5.90 <sup>b</sup> ±0.35   | 4.66 <sup>c</sup> ±0.35   | 3.97 <sup>c</sup> ±0.35    | 3.82 <sup>c</sup> ±0.35    | *    |
| Globulin (g/dl)       | 3.02 <sup>b</sup> ±0.42    | 4.38 <sup>a</sup> ±0.42   | 2.47 <sup>bc</sup> ±0.42   | 2.54 <sup>bc</sup> ±0.42  | 1.81 <sup>cd</sup> ±0.42  | 1.54 <sup>d</sup> ±0.42    | 1.35 <sup>d</sup> ±0.42    | *    |
| A/G ratio             | 1.27 <sup>b</sup> ±0.71    | 1.64 <sup>ab</sup> ±0.71  | 1.59 <sup>ab</sup> ±0.71   | 1.46 <sup>ab</sup> ±0.71  | 3.17 <sup>a</sup> ±0.71   | 2.29 <sup>ab</sup> ±0.71   | 2.18 <sup>ab</sup> ±0.71   | *    |
| Cholesterol (mg/dl)   | 84.41 <sup>a</sup> ±5.99   | 86.32 <sup>a</sup> ±5.99  | 60.44 <sup>b</sup> ±5.99   | 40.52 <sup>c</sup> ±5.99  | 42.93 <sup>c</sup> ±5.99  | 36.74 <sup>c</sup> ±5.99   | 35.66 <sup>c</sup> ±5.99   | *    |
| Triglycerides (mg/dl) | 135.30 <sup>ab</sup> ±2.58 | 140.80 <sup>b</sup> ±2.58 | 133.36 <sup>ab</sup> ±2.58 | 150.74 <sup>a</sup> ±2.58 | 140.50 <sup>b</sup> ±2.58 | 133.71 <sup>ab</sup> ±2.58 | 137.51 <sup>ab</sup> ±2.58 | *    |
| Creatinine (mg/dl)    | 1.69±0.47                  | 2.15±0.47                 | 1.95±0.47                  | 1.5±0.47                  | 1.65±0.47                 | 1.9±0.47                   | 1.8±0.47                   | NS   |
| (AST) (u/L)           | 2.06 <sup>b</sup> ±0.56    | 3.18 <sup>a</sup> ±0.56   | 2.63 <sup>b</sup> ±0.56    | 2.26 <sup>b</sup> ±0.56   | 2.15 <sup>b</sup> ±0.56   | 2.14 <sup>b</sup> ±0.56    | 2.03 <sup>b</sup> ±0.56    | *    |
| (ALT) (u/L)           | 6.15 <sup>ab</sup> ±0.22   | 7.29 <sup>a</sup> ±0.22   | 7.02 <sup>a</sup> ±0.22    | 6.51 <sup>ab</sup> ±0.22  | 6.03 <sup>bc</sup> ±0.22  | 5.24 <sup>c</sup> ±0.22    | 5.13 <sup>c</sup> ±0.22    | *    |

\* (T<sub>1</sub>) (Control positive). (17% CP) ;(T<sub>2</sub>) Basal diet (BD) 14% CP (control negative);(T<sub>3</sub>) Basal diet + 150 ppm BHT; (T<sub>4</sub>) Basal diet + 5g of *Senecio glaucus* powder /kg feed; (T<sub>5</sub>) Basal diet + 10g of *Senecio glaucus* powder /kg feed; (T<sub>6</sub>) Basal diet + 0.5ml of *Senecio glaucus* extract (100 mg/l) ;(T<sub>7</sub>) Basal diet + 1ml of *Senecio glaucus* extract (100 mg/l). \*\*a and b Means within the same row differ significantly; NS =not significant, \*= P< 0.05.

**Table (10): Effect of supplemented dietary *Senecio glaucus*(SG) powder or extract and Butylated Hydroxy Toluene (BHT) on organoleptic evaluation of cooked rabbits meat (means  $\pm$  SE).**

| Item                  | Treatment*                    |                              |                                |                               |                               |                               |                                | Sig. |
|-----------------------|-------------------------------|------------------------------|--------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|------|
|                       | T <sub>1</sub>                | T <sub>2</sub>               | T <sub>3</sub>                 | T <sub>4</sub>                | T <sub>5</sub>                | T <sub>6</sub>                | T <sub>7</sub>                 |      |
| Color                 | 7.88 <sup>ab</sup> $\pm$ 0.11 | 6.11 <sup>b</sup> $\pm$ 0.67 | 8.88 <sup>a</sup> $\pm$ 0.11   | 7.88 <sup>ab</sup> $\pm$ 0.51 | 8.00 <sup>ab</sup> $\pm$ 0.41 | 8.33 <sup>ab</sup> $\pm$ 0.47 | 8.88 <sup>a</sup> $\pm$ 0.11   | *    |
| Taste                 | 7.77 <sup>ab</sup> $\pm$ 0.43 | 6.22 <sup>b</sup> $\pm$ 0.49 | 7.88 <sup>ab</sup> $\pm$ 0.309 | 8.22 <sup>ab</sup> $\pm$ 0.27 | 8.00 <sup>ab</sup> $\pm$ 0.28 | 8.77 <sup>a</sup> $\pm$ 0.22  | 7.88 <sup>ab</sup> $\pm$ 0.309 | *    |
| Oder                  | 8.33 <sup>a</sup> $\pm$ 0.44  | 6.55 <sup>b</sup> $\pm$ 0.68 | 7.77 <sup>ab</sup> $\pm$ 0.32  | 7.77 <sup>ab</sup> $\pm$ 0.52 | 7.33 <sup>ab</sup> $\pm$ 0.28 | 8.33 <sup>a</sup> $\pm$ 0.28  | 7.87 <sup>ab</sup> $\pm$ 0.32  | *    |
| Texture               | 7.44 $\pm$ 0.41               | 6.77 $\pm$ 0.59              | 7.11 $\pm$ 0.38                | 7.77 $\pm$ 0.43               | 7.66 $\pm$ 0.28               | 8.00 $\pm$ 0.33               | 7.61 $\pm$ 0.38                | NS   |
| Flavor                | 7.66 <sup>b</sup> $\pm$ 0.28  | 7.00 <sup>c</sup> $\pm$ 0.52 | 7.32 <sup>b</sup> $\pm$ 0.20   | 7.45 <sup>ab</sup> $\pm$ 0.48 | 8.51 <sup>a</sup> $\pm$ 0.29  | 7.55 <sup>ab</sup> $\pm$ 0.17 | 8.11 <sup>a</sup> $\pm$ 0.20   | *    |
| Allover acceptability | 7.84 <sup>ab</sup> $\pm$ 0.23 | 6.63 <sup>b</sup> $\pm$ 0.45 | 7.79 <sup>ab</sup> $\pm$ 0.16  | 7.82 <sup>ab</sup> $\pm$ 0.47 | 7.91 <sup>ab</sup> $\pm$ 0.25 | 8.24 <sup>a</sup> $\pm$ 0.22  | 8.07 <sup>a</sup> $\pm$ 0.16   | *    |

\*(T<sub>1</sub>) (Control positive). (17% CP); (T<sub>2</sub>) Basal diet (BD) 14% CP (control negative);(T<sub>3</sub>) Basal diet + 150 ppm BHT; (T<sub>4</sub>) Basal diet + 5g of *Senecio glaucus* powder /kg feed; (T<sub>5</sub>) Basal diet + 10g of *Senecio glaucus* powder /kg feed; (T<sub>6</sub>) Basal diet + 0.5ml of *Senecio glaucus* extract (100 mg/l) ;(T<sub>7</sub>) Basal diet + 1ml of *Senecio glaucus* extract (100 mg/l). \*\*a and b Means within the same row differ significantly; NS =not significant, \*= P<0.05.