**Table(5):** Concentration (%) and uptake (mg/ plant) of nitrogen , phosphorous and potassium by onion plants at 100 days after transplanting as affected by applying chicken manure and ammonium sulfate during the two growth seasons (2001/2002 & 2002/2003) .

| Treatment | | Nitrogen | | Phosphorus | | Potassium | | Nitrogen | | Phosphorus | | Potassium | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | % | Uptake, (mg/ plant) | % | Uptake, (mg/ plant) | % | Uptake, (mg/ plant) | % | Uptake, (mg/ plant) | % | Uptake, (mg/ plant) | % | Uptake, (mg/ plant) |
| | | First season | | | | | | Second season | | | | | |
| Control | | 0.96 | 14.21 | 0.20 | 2.96 | 0.84 | 12.43 | 0.88 | 13.36 | 0.20 | 2.76 | 0.68 | 15.37 |
| A | $a_1$ | 1.81 | 131.21 | 0.23 | 16.49 | 1.43 | 102.53 | 1.75 | 120.28 | 0.24 | 16.49 | 1.20 | 82.44 |
| | $a_2$ | 1.85 | 144.67 | 0.27 | 21.11 | 1.60 | 125.12 | 1.75 | 125.30 | 0.27 | 19.33 | 1.50 | 107.40 |
| | $a_3$ | 1.92 | 156.86 | 0.33 | 26.96 | 1.71 | 139.71 | 1.81 | 145.71 | 0.30 | 24.15 | 1.71 | 137.66 |
| | $a_4$ | 2.01 | 187.55 | 0.42 | 39.19 | 1.78 | 166.01 | 1.92 | 166.85 | 0.38 | 33.02 | 1.76 | 152.94 |
| B | $b_1$ | 1.82 | 131.22 | 0.31 | 22.35 | 1.26 | 90.83 | 1.73 | 123.68 | 0.28 | 20.02 | 1.31 | 93.67 |
| | $b_2$ | 1.84 | 151.50 | 0.33 | 27.16 | 1.40 | 115.22 | 1.81 | 137.20 | 0.31 | 23.50 | 1.49 | 112.18 |
| | $b_3$ | 1.91 | 172.05 | 0.36 | 32.40 | 1.52 | 136.80 | 1.89 | 165.56 | 0.34 | 29.78 | 1.74 | 152.34 |
| | $b_4$ | 2.05 | 220.99 | .40 | 43.12 | 1.61 | 173.56 | 1.98 | 198.40 | 0.41 | 41.08 | 1.78 | 178.36 |
| ½ AB | $a_1b_1$ | 1.83 | 161.22 | 0.30 | 26.43 | 1.13 | 99.55 | 1.76 | 148.54 | 0.29 | 24.48 | 1.34 | 117.10 |
| | $a_2b_2$ | 1.90 | 187.72 | 0.33 | 32.69 | 1.39 | 137.33 | 1.84 | 177.93 | 0.31 | 30.00 | 1.57 | 151.82 |
| | $a_3b_3$ | 1.96 | 221.28 | 0.37 | 41.77 | 1.59 | 179.28 | 1.92 | 214.85 | 0.38 | 42.52 | 1.75 | 195.83 |
| | $a_4b_4$ | 2.15 | 267.25 | 0.51 | 63.39 | 1.89 | 234.93 | 2.01 | 236.38 | 0.48 | 56.45 | 1.83 | 215.21 |
| L.S.D | 5% | 0.054 | 27.80 | 0.039 | 4.63 | 0.120 | 17.35 | 0.051 | 17.88 | 0.038 | 5.75 | 0.507 | 19.27 |
| | 1% | 0.073 | 37.91 | 0.054 | 6.32 | 0.164 | 23.67 | 0.070 | 24.38 | 0.052 | 7.84 | 0.691 | 36.20 |

A : Chicken manure – $a_1$, ,$a_2$ – $a_3$ and $a_4$ represent 2.4.6 and 8 ton / fed ., respectively .

B : Ammonium sulfate – $b_1$ , $b_2$ , $b_3$ , and $b_4$ represent 37 , 74, 111 and 148 kg N/ fed ., respectively .

½AB : - $a_1b_1$ , $a_2$ $b_1$ , $a_3$ $b_3$ and $a_4$ $b_4$ represent 1 ton + 18.5 kg N , 2 ton + 37 kg N, 3 ton + 55.5 kg N and 4 ton + 74 kg N / fed ., respectively .

**Table (6):** Concentration (%) and uptake (kg/ fed.) of nitrogen , phosphorus and potassium by onion plant at harvest as affected by applying chicken manure and ammonium sulfate during the two growth seasons (2001/2002 & 2002/2003) .

| Treatment | | Nitrogen | | Phosphorus | | Potassium | | Nitrogen | | Phosphorus | | Potassium | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | % | Uptake (kg/ fed.) | % | Uptake (kg/ fed.) | % | Uptake (kg/ fed.) | % | Uptake (kg/ fed.) | % | Uptake (kg/ fed.) | % | Uptake (kg/ fed.) |
| | | First season | | | | | | Second season | | | | | |
| Control | | 0.23 | 0.67 | 0.13 | 0.38 | 0.36 | 2.51 | 0.21 | 0.59 | 0.15 | 0.43 | 0.88 | 2.46 |
| A | $a_1$ | 0.75 | 5.85 | 0.23 | 2.18 | 1.08 | 8.52 | 0.71 | 5.75 | 0.19 | 1.54 | 1.01 | 8.81 |
| | $a_2$ | 0.81 | 7.29 | 0.23 | 3.15 | 1.21 | 12.15 | 0.78 | 7.49 | 0.20 | 1.92 | 1.18 | 11.33 |
| | $a_3$ | 0.89 | 1.95 | 0.27 | 4.80 | 1.32 | 19.19 | 0.89 | 10.77 | 0.23 | 2.78 | 1.35 | 16.34 |
| | $a_4$ | 0.93 | 14.14 | 0.32 | 4.86 | 1.45 | 22.04 | 0.96 | 15.17 | 0.29 | 4.58 | 1.43 | 22.59 |
| B | $b_1$ | 0.75 | 6.23 | 0.23 | 1.91 | 1.09 | 9.05 | 0.73 | 6.72 | 0.20 | 1.84 | 1.06 | 9.75 |
| | $b_2$ | 0.82 | 9.05 | 0.29 | 3.20 | 1.21 | 13.32 | 0.78 | 8.51 | 0.23 | 2.51 | 1.19 | 12.97 |
| | $b_3$ | 0.93 | 12.57 | 0.32 | 4.32 | 1.37 | 18.50 | 0.87 | 11.48 | 0.24 | 3.17 | 1.41 | 18.62 |
| | $b_4$ | 0.98 | 17.44 | 0.38 | 6.76 | 1.51 | 26.88 | 0.98 | 16.95 | 0.31 | 5.36 | 1.57 | 27.16 |
| ½ AB | $a_1b_1$ | 0.83 | 9.96 | 0.28 | 2.76 | 1.09 | 12.97 | 0.85 | 9.20 | 0.25 | 2.70 | 1.13 | 12.20 |
| | $a_2b_2$ | 0.95 | 14.27 | 0.35 | 3.76 | 1.35 | 18.19 | 0.93 | 13.14 | 0.31 | 4.37 | 1.37 | 19.31 |
| | $a_3b_3$ | 1.03 | 16.18 | 0.39 | 4.24 | 1.56 | 20.33 | 0.97 | 15.16 | 0.34 | 5.30 | 1.52 | 27.71 |
| | $a_4b_4$ | 1.18 | 22.30 | 0.43 | 8.13 | 1.78 | 33.64 | 1.13 | 21.81 | 0.39 | 7.26 | 1.68 | 32.42 |
| L.S.D | 5% | 0.054 | 1.249 | 0.030 | 0.255 | 0.066 | 2.670 | 0.066 | 1.950 | 0.034 | 0.394 | 0.076 | 1.620 |
| | 1% | 0.073 | 1.703 | 0.040 | 0.348 | 0.090 | 3.640 | 0.040 | 2.660 | 0.046 | 0.537 | 0.104 | 2.200 |

A : Chicken manure – $a_1$ , $a_2$ , $a_3$ and $a_4$ represent 2.4.6 and 8 ton / fed ., respectively .

B : Ammonium sulfate – $b_1$ , $b_2$ , $b_3$ , and $b_4$ represent 37 , 74, 111 and 148 kg N/ fed ., respectively .

½AB : - $a_1b_1$, $a_2$ $b_2$ , $a_3$ $b_3$ and $a_4$ $b_4$ represent 1 ton + 18.5 kg N , 2 ton + 37 kg N, 3 ton + 55.5 kg N and 4 ton + 74 kg N / fed ., respectively .