* 1. **Test Solutions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **S-Chelate 12 Star** | **X**  (Smells of ammonia, colourless) | **New X**  (No odour, dark brown)  “Now with natural growth stimulant” | **Y** |
| NPK | 7.6 : 3.3 : 18.1 | 6 : 1.3 : 5 | 7:1.3:4.2 | 4 : 1.3 : 6.6 |
| Total NPK | 29% | 12.3% | 15% | 11.9% |
| Ready to use  (RTU) solution | 8.3gram of powder  (2 teaspoons)  of powder to 4.5 litres | 20ml to  4.5 litres | 45ml to 4.5 litres | 20ml to  4.5 litres |
| NPK in RTU solution | 0.053% | 0.053% | **0.15%** | 0.053% |
| pH of RTU solution | 6.1 |  | 8.7 | 7.6 |
| **Nitrogen** | 7.0% | 6.0% | 7.0% | 4.0% |
| *Urea* | *-* | *3.3%* | *3.5%* | *2.1%* |
| *Nitric* | *6.0%* | *1.7%* | *1.7%* | *-* |
| *Ammoniacal* | *1.0%* | *1.0%* | *1.8%* | *-* |
| **Nitrogen Analysis-%** | **(3)1.71** |  | **(1)2.64** | **(2)2.34** |
| **Phosphorus** | 3.0% | 1.3% | 1.3% | 1.3% |
| **Phosphorus Analysis - ppm** | **(3)1210** |  | **(1)2089** | **(2)1592** |
| **Potassium** | 18.0% | 5.0% | 4.2% | 6.6% |
| **Potassium Analysis- ppm** | **(2)12229** |  | **(3)11989** | **(1)14163** |
|  |  |  |  |  |
| **Micronutrients:** |  |  |  |  |
| *Boron* | 0.1% | - | - |  |
| **Not analysed** |  |  |  |  |
| *S-Chelated Calcium* | 2.1% | - | - | - |
| **Calcium Analysis - ppm** | **(1)15241** |  | **(2)15120** | **(3)14944** |
| *S-Chelated Copper* | 0.1% | - | - | - |
| *EDTA chelated Copper* | - | 0.002% | 0.002% | - |
| **Copper Analysis - ppm** | **(2)2.758** |  | **(3)2.083** | **(1)21.463!** |
| *S-Chelated Iron* | 0.7% | - |  | - |
| *DPTA chelated Iron* | - | 0.03% | 0.03% | - |
| **Iron Analysis - ppm** | **(1)63.87** |  | **(3)57.04** | **(2)59.04** |
| *S-Chelated Magnesium* | 0.4% | - |  |  |
| **Magnesium Analysis-ppm** | **(1)8422** |  | **(3)6899** | **(2)7916** |
| *S-Chelated Manganese* | 0.4% | - |  | - |
| *EDTA chelated Manganese* | - | 0.01% | 0.01% | - |
| **Manganese Analysis-ppm** | **(2)82.6** |  | **(1)112.7** | **(3)60.3** |
| *Molybdenum* | 0.03% | 0.001% | 0.001% | - |
| **Molybdenum Analysis-ppm** | **(1)0.704!** |  | **(3)0.038** | **(2)0.086** |
| *S-Chelated Zinc* | 0.2% | - |  | - |
| *EDTA chelated Zinc* | - | 0.002% | 0.002% | - |
| **Zinc Analysis - ppm** | **(2)16.93** |  | **(3)16.22** | **(1)18.59** |
| *Sulphur* | 1.4% | - |  | - |
| **Sulphur analysis-ppm** | **(1)2707** |  | **(2)2651** | **(3)2555** |
| ***Seaweed enriched*** | No | No |  | Yes |
| “Natural Growth Stimulant” | Not claimed | Not claimed | Claimed | Not claimed |
| **Carbon analysis-%** | **46.63** |  | **46.890** | **46.66** |
| **Aluminium analysis-ppm** | **22.52** |  | **26.394** | **26.471** |
| **Arsenic analysis-ppm** | **<DL** |  | **<DL** | **<DL** |
| **Cadmium analysis-ppm** | **0.123** |  | **0.132** | **0.146** |
| **Cobalt analysis-ppm** | **<DL** |  | **<DL** | **<DL** |
| **Chromium analysis-ppm** | **0.291** |  | **0.185** | **0.235** |
| **Sodium analysis-ppm** | **23.662** |  | **14.099** | **25.078** |
| **Nickel analysis-ppm** | **0.424** |  | **0.379** | **0.373** |
| **Lead analysis-ppm** | **<DL** |  | **<DL** | **<DL** |
| **Selenium analysis-ppm** | **<DL** |  | **<DL** | **<DL** |
| **Titanium analysis-ppm** | **0.596** |  | **0.503** | **0.634** |
|  | **<DL=under detection limit** |  |  |  |