**TABLE -1: CHANGES IN GROWTH PARAMETERS AND PIGMENT CONTENTS IN ENDOSULPHAN, EC- 35 EXPOSED BLUE GREEN ALGA**

 **(Anabena cylindrica,L.) AT DIFFERENT EXPOSURE AND RECOVERY PERIODS (Data are expressed in Mean + S.D of three replicates)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Conc.of toxicants** | **Parameter** |  **EXPOSURE IN DAY** |  **RECOVERY IN DAY** |
|  |  | **0D** | **3D** | **6D** | **9D** | **12D** | **15D** | **5D** | **10D** | **15D** |
| **Control** | OD 530 nm | 0.025±0.005 | 0.040±0.015 | 0.065±0.016 | 0.085±0.005 | 0.099±0.008 | 0.120±0.009 | 0.135±0.010 | 0.165±0.015 | 0.195±0.016 |
| Total Chl.  | 0.026±0.002 | 0.047±0.020 | 0.058±0.017 | 0.069±0.018 | 0.081±0.011 | 0.099±0.014 | 0.112±0.009 | 0.124±0.012 | 0.131±0.008 |
| Phaeophytin | 0.016±0.002 | 0.024±0.004 | 0.036±0.005 | 0.051±0.003 | 0.066±0.001 | 0.091±0.004 | 0.115±0.003 | 0.151±0.002 | 0.189±0.006 |
| Carotenoid | 0.0021±0.0004 | 0.0038±0.0009 | 0.0051±0.0007 | 0.0086±0.0006 | 0.010±0.0011 | 0.0118±0.0012 | 0.0126±0.0009 | 0.0154±0.0014 | 0.0178±0.0006 |
| Dry weight | 4.8±0.3 | 6.4±0.9 | 8.2±0.4 | 10.6±1.2 | 13.9±0.7 | 15.6±0.5 | 18.4±1.2 | 21.5±0.6 | 24.6±0.9 |
|  **A** **2.5ml/L** | OD 530 nm | 0.025±0.008 | 0.045±0.008 | 0.080±0.005 | 0.090±0.004 | 0.095±0.065 | 0.105±0.039 | 0.115±0.028 | 0.120±0.015 | 0.130±0.008 |
| Total Chl.  | 0.026±0.002 | 0.051±0.005 | 0.062±0.006 | 0.073±0.011 | 0.080±0.014 | 0.079±0.009 | 0.081±0.014 | 0.084±0.011 | 0.088±0.014 |
| Phaeophytin | 0.016±0.002 | 0.022±0.009 | 0.031±0.002 | 0.042±0.006 | 0.049±0.004 | 0.051±0.008 | 0.078±0.005 | 0.099±0.007 | 0.118±0.002 |
| Carotenoid | 0.0021±0.0004 | 0.0037±0.0005 | 0.0052±0.0008 | 0.0091±0.0003 | 0.0097±0.0005 | 0.0099±0.0004 | 0.0098±0.0007 | 0.0104±0.0009 | 0.0112±0.0011 |
| Dry weight | 4.8±0.3 | 6.7±0.5 | 8.5±0.8 | 11.4±0.7 | 14.2±0.5 | 15.4±1.1 | 18.1±0.2 | 19.9±0.3 | 22.6±1.4 |
|  **B** **3.0ml/L** | OD 530 nm | 0.025±0.005 | 0.040±0.007 | 0.055±0.010 | 0.065±0.015 | 0.070±0.008 | 0.085±0.004 | 0.105±0.015 | 0.115±0.009 | 0.120±0.012 |
| Total Chl.  | 0.02±0.002 | 0.049±0.003 | 0.049±0.009 | 0.051±0.007 | 0.054±0.005 | 0.052±0.004 | 0.049±0.006 | 0.061±0.009 | 0.066±0.012 |
| Phaeophytin | 0.016±0.002 | 0.019±0.006 | 0.036±0.003 | 0.038±0.004 | 0.049±0.002 | 0.048±0.003 | 0.044±0.008 | 0.051±0.007 | 0.054±0.008 |
| Carotenoid | 0.0021±0.0004 | 0.0026±0.0007 | 0.0023±0.0003 | 0.0021±0.0009 | 0.0024±0.0011 | 0.0028±0.0014 | 0.0031±0.0009 | 0.0034±0.0012 | 0.0042±0.0014 |
| Dry weight | 4.8±0.3 | 6.3±0.4 | 6.8±0.5 | 7.1±0.3 | 7.4±0.4 | 7.0±0.6 | 7.1±0.3 | 7.9±0.4 | 8.4±0.2 |
|  **C** **3.25ml/L** | OD 530 nm | 0.025±0.005 | 0.030±0.010 | 0.025±0.004 | 0.010±0.002 | 0.015±0.004 | 0.010±0.003 | 0.012±0.004 | 0.010±0.002 | 0.025±0.004 |
| Total Chl.  | 0.026±0.002 | 0.025±0.004 | 0.021±0.003 | 0.012±0.002 | 0.008±0.002 | 0.004±0.001 | 0.002±0.0004 | 0.011±0.0005 | 0.001±0.0005 |
| Phaeophytin | 0.016±0.002 | 0.029±0.003 | 0.040±0.005 | 0.049±0.006 | 0.022±0.003 | 0.011±0.004 | 0.016±0.003 | 0.011±0.004 | 0.005±0.002 |
| Carotenoid | 0.0021±0.0004 | 0.0019±0.0003 | 0.0016±0.0002 | 0.0013±0.0003 | 0.0011±0.0002 | 0.0009±0.0004 | 0.0008±0.00002 | 0.0003±0.0002 | 0.0002±0.00005 |
| Dry weight | 4.8±0.3 | 4.4±0.20 | 3.4±0.02 | 2.2±0.03 | 1.2±0.02 | 0.8±0.02 | 0.5±0.01 | 0.4±0.01 | 0.4±0.1 |