

Table 2 Effect of hormonal supplementation with MS medium for callus induction in cv. Khandagiri

| Hormone recipe (mg/l) | Days first callus observed | CIF (%)                 | Callus growth | % of necrotic calli | Freq. of embryo-genic calli (%) | Nature of calli             |
|-----------------------|----------------------------|-------------------------|---------------|---------------------|---------------------------------|-----------------------------|
| <b>2,4-D</b>          |                            |                         |               |                     |                                 |                             |
| 1.0                   | 19                         | 50.1±0.85 <sup>e*</sup> | +             | 1.1                 | Nil                             | Hard, compact               |
| 1.5                   | 12                         | 58.4±1.02 <sup>d</sup>  | ++            | 4.6                 | 0.08                            | Compact                     |
| 2.0                   | 11                         | 62.8±0.53 <sup>c</sup>  | ++++          | 3.2                 | 58.8                            | Bit friable                 |
| 2.5                   | 10                         | 70.2±0.44 <sup>b</sup>  | ++++          | 0.8                 | 60.5                            | Friable                     |
| 3.0                   | 10                         | 51.6±1.02 <sup>e</sup>  | +++           | 8.0                 | 35.2                            | Soft                        |
| <b>2,4-D+Kn</b>       |                            |                         |               |                     |                                 |                             |
| 2.5 + 0.10            | 14                         | 55.8±1.01 <sup>d</sup>  | +             | 7.2                 | 15.2                            | Soft                        |
| 2.5 + 0.25            | 16                         | 51.4±1.24 <sup>e</sup>  | ++            | 8.0                 | 18.0                            | -do-                        |
| 2.5 + 0.50            | 15                         | 76.0±0.55 <sup>a</sup>  | +++++         | 0.4                 | 70.5                            | Fast growing nodular calli  |
| 2.5 + 0.75            | 18                         | 50.2±0.72 <sup>e</sup>  | +             | 12.0                | 53.0                            | Nodular calli, bit necrotic |
| 2.5 + 1.00            | 20                         | 35.0±1.08 <sup>f</sup>  | +             | 20.3                | 28.0                            | Dirty, Necrotic             |
| <b>2,4-D+BAP</b>      |                            |                         |               |                     |                                 |                             |
| 2.5 + 0.10            | 22                         | 16.8±0.81 <sup>h</sup>  | ++            | 13.0                | Nil                             | Small watery calli          |
| 2.5 + 0.25            | 24                         | 23.8±0.74 <sup>g</sup>  | +++           | 13.2                | Nil                             | Very soft                   |
| 2.5 + 0.50            | 20                         | 24.0±1.06 <sup>g</sup>  | +             | 18.6                | Nil                             | -do-                        |
| 2.5 + 0.75            | 18                         | 21.2±0.77 <sup>g</sup>  | +             | 23.4                | Nil                             | Soft                        |
| 2.5 + 1.00            | 14                         | 8.5±1.08 <sup>i</sup>   | +             | 28.1                | Nil                             | -do-                        |

Note: Means followed by the same letter within columns were not significantly different at  $p < 0.05$ ; \*Values are mean  $\pm$  S.E