mahabaleshwarensis Sathe & Deshpande as the type species. The genus, as the name suggests, was regarded as enjoying the intermediate position between the two allied genera namely *Chlorophyllum* Massee and *Macrolepiota* Singer on account of the following four characters which are indicative of its distinct position as well from the above two-(i) prime rose yellow colour of basidiospores in mass, individual grayish yellow green in ammonia solution; (ii) total absence of clamp connections in tetrasporic forms also; (iii) endosporium metachromatic in cresyl blue or cotton blue; (iv) spores strongly staining in alkaline congo red.

Recently, it has been proposed by Manjula[2] that the said species could be accommodated under *Macrolepiota*. This appears to be without any justification totally ignoring the above mentioned features[1,3]. It, therefore, becomes necessary to attract the attention of the workers in this field to the distinctiveness and therefore the validity of the genus *Chlorolepiota* is discussed below:

According to the generic concept and circumscription of the genus *Macrolepiota* by Singer[4] the prime rose yellow colour of the spores in mass along with the total absence of clamp connections in tetrasporic forms prohibits inclusion of this species under it. On the other hand, the metachromatic staining of endosporium and strong affinity of spore-wall towards alkaline congo red, prevent its inclusion under *Chlorophyllum*. It is, therefore, clear that the balance of closeliness of the species under consideration is equal towards either of these genera and its accommodation into a separate genus as originally proposed[1] is fully justified. The transfer of this species to *Macrolepiota* as proposed[2] is, therefore, wrong and not justified and is therefore retained under *Chlorolepiota*. Furthermore, Manjula[2] has erroneously stated the type locality to be Poona, which is in fact Mahabaleshwar. Moreover, the clamp connections are also reported erroneously to be present though they are totally absent for the *Chlorolepiota*[1,2].

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A NEW WEED HOST OF RICE TUNGRO VIRUS COMPLEX

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A dicotyledonous weed (*Hydrolia zeylanica*) growing in and around the paddy fields of this Institute exhibiting typical yellowing symptoms was noticed during the 1986 *kharif* season. This weed grows profusely on the sides of irrigation channel of the experimental plots where tungro epiphytotics have been successfully created every year by introducing the inoculum source during the third week of September coinciding with the occurrence of green leafhoppers in nature. *H. zeylanica* showed pronounced vein clearing on both the young and old leaves with yellowing of lamina on old leaves (figure 1).

The method of testing this weed for the presence of tungro viruses included a direct test in which artificial inoculation was done followed by latex flocculation test[1]. A few plants of this weed showing typical yellowing symptoms were brought to the nethouse and transplanted individually in earthen pots and maintained inside the insect-proof cages. Forty non-viruliferous green leafhoppers (*Nephotettix virescense* Distant) were allowed to feed on these infected weeds for 24 hr to acquire the viruses and then the leafhoppers were caged on 20-day-old T(N)1 seedlings for 24 hr at the rate of two viruliferous hoppers per seedling. Altogether 20 seedlings were inoculated. Typical tungro symptoms including interveinal chlorosis and twisting of newly emerged leaves appeared 8 days after inoculation. Gradually, the infected rice plants showed severe stunting (74% decrease in plant height after 15 days of inoculation).

The latex flocculation test carried out using sensitized antisera of both tungro bacilliform and tungro spherical virus particles received from the IRRI, Philippines revealed the presence of both bacilliform and spherical virus particles in 80% of infected plants, whereas the remaining 20% of infected plants contained only spherical type of particles. Back inoculation from tungro infected T(N)1 plants to healthy plants of the weed *H.*

Figure 1. Severe tungro infection on the weed *H. zeylanica* and on T(N)1 seedlings.

zeylanica was performed 30 days after inoculation. Typical yellowing and vein clearing symptoms were observed on the weed.

H. zeylanica, identified for the first time as the host of tungro viruses, assumes significance in explaining the perpetuation of tungro viruses in nature. However, the existence of five species of graminaceous plants harbouring tungro viruses in nature and their possibility of serving as reservoirs of viral inoculum has been reported in India[2]. It has also been shown[3] that the vector *N. virescense* can feed on few plant species including some dicotyledonous plants. Forty-three plant species comprising (6 cereals, 37 species of Gramineae and Cyperaceae including 17 species of *Oryza*) have been tested artificially for their possible role as host for tungro virus and its vector[4]. Their role in nature is not yet known. Therefore, the necessity of a thorough survey of various weeds in different paddy growing areas is necessary for a better understanding of the perpetuation of tungro viruses and to identify collateral plant species harbouring these viruses in nature.

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REVERSAL OF CHLOROFLUORENOL-INDUCED INHIBITION IN ELONGATION OF BARLEY SEEDLINGS BY GIBBERELLIC ACID

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SYNTHETIC growth regulator morphactin has been shown to induce dwarfism in a wide range of plant species[1]. However, its mechanism of action is not fully understood. Most of the studies have been oriented towards its effect on polar auxin transport[2].The role of endogenous hormones in the morphactin-induced inhibition of organogenesis has been studied in leaf ex-plants of *Kalanchoe daigremontiana*[3]. The present study using barley is an attempt to throw some light on the possible role of gibberellic acid (GA) in the morphactin-induced inhibition of elongation growth.

Seeds of huskless barley (*Hordeum vulgare* L. c.v. 292) were soaked in solutions of GA and chlorofluorenol (CFL) at concentrations ranging from 10^{-9} to 10^{-3}M, for 20 hr at 9°C under sterile conditions. The solutions were then decanted and the seeds grown on moistened (with water) filter papers in Petri dishes for 120 hr in 12 hr light (17000 lux, white fluorescent) at 25 ± 1°C. Each value is an average of 5 replicates of 20 seeds each. Distilled water treatments served as controls.

Although a wide range of concentrations were tested, data on only the effective concentrations are presented in the tables. Lower concentrations were generally ineffective. CFL inhibited shoot elongation significantly only at high concentrations (10^{-5} and 10^{-4}M) whereas in root a concentration-dependent inhibition (10–75%) from 10^{-9} onwards was observed (table 1, data not shown for concentrations less than 10^{-6}M). Also, at any particular concentration, the extent of inhibition in elongation of the roots was greater than the corresponding effect on shoot. Similar results were obtained[3] in *K. daigremontiana* where root initiation was inhibited more than shoot initiation after CFL application. Whether this effect is on the hormonal balance (as is the hormonal concept of differentiation[4]) or at the macromolecular level is to be studied. Also, as pointed out by Carmi and Van Staden[5] the hormonal effects on shoot may be a consequence of their