Table 1 *Post-thaw motility and fertility of frozen semen in Surti buffaloes as influenced by bulls, dilutors and seasons*

Bull/ dilutor	Season of freezing	Season of insemina-tions	No. of fresh A.I.	No. of buffaloes followed	No. found pregnant	Concep-tion rate (%)	Post-thaw motility (%)
SB_1	Summer	Winter	422	238	96	40.34	54.75 ± 3.32
	Winter	Winter	325	192	96	50.00	56.89 ± 3.92
	Winter	Summer	77	56	26	46.43	56.89 ± 3.92
	—	Average	824	486	218	44.86*	55.68 ± 1.89*
SB_2	S	W	431	289	111	38.41	48.71 ± 4.53
	W	W	351	223	92	41.26	54.47 ± 3.89
	W	S	112	86	30	34.88	54.47 ± 3.89
	—	Average	894	598	223	38.96	51.63 ± 2.78
SB_3	S	W	411	230	85	36.96	43.97 ± 3.77
	W	W	357	250	97	38.80	48.67 ± 4.03
	W	S	70	64	27	42.18	48.67 ± 4.03
	—	Average	838	544	209	38.42	45.92 ± 3.61*
SB_4	S	W	374	231	87	37.66	53.17 ± 2.89
	W	W	324	191	76	39.79	51.50 ± 3.67
	W	S	158	97	36	37.11	51.50 ± 3.67
	—	Average	856	519	199	38.34	52.38 ± 2.57
TFYG†	S	W	553	354	152	42.94	51.88 ± 3.38
	W	W	446	304	135	44.41	52.50 ± 4.13
	W	S	155	115	43	37.39	52.50 ± 4.13
	—	Average	1154	773	330	42.69*	52.28 ± 1.57
EYCG	S	W	495	274	105	38.32	48.75 ± 2.85
	W	W	415	274	115	41.97	51.87 ± 2.56
	W	S	126	88	33	37.50	51.87 ± 2.56
	—	Average	1036	636	253	39.78	50.63 ± 1.78
LYG	S	W	590	360	122	33.89	49.62 ± 2.78
	W	W	496	278	111	40.41	52.32 ± 3.17
	W	S	136	100	43	43.00	52.32 ± 3.17
	—	Average	1222	738	276	37.50*	51.38 ± 1.63
Over-all	S	W	1638	988	379	38.36	48.92 ± 1.89
	W	W	1357	856	361	42.17	53.87 ± 1.98*
	W	S	417	303	119	39.27	53.87 ± 1.98*
	Summer§	Summer	78	53	17	32.08*	48.92 ± 1.89
	—	Average	3490	2200	876	39.82	51.58 ± 1.24

*Significant at 5% level between bulls, dilutors or seasons; †TFYG = tris fructose yolk glycerol, EYCG = egg yolk citrate glycerol, LYG = lactose yolk glycerol; § Due to very limited number of inseminations, bull-wise and dilutor-wise distribution of summer frozen-summer insemination has not been shown.

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VALIDITY OF THE GENUS *CHLOROLEPIOTA*—A MEMBER OF AGARICALES

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THE genus *Chlorolepiota* Sathe & Deshpande[1] was established to accommodate the specimen collected from Mahabaleshwar (typus locus), a hill station, 1375 m above MSL 120 km from Pune with *C.*

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.*