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BRIEF COMMUNICATION

THE INFLUENCE OF MOULD-INFECTION OF THE NUTRIENT MEDIUM ON THE DIMENSIONS OF LEMNA GIBBA L.

L. P. M. J. WETSTEYN**, L. DE LANGE* and A. H. PIETERSE***

* Hugo de Vries-Laboratorium, Universiteit van Amsterdam, Sarphatistraat 221, 1018 BX Amsterdam
** do., at present Deltadienst, Hoofdafd. Milieu en Inrichting, Grenadierweg 31, 4330 AK Middelburg
*** Kon. Instituut voor de Tropen. Afd. Agrarisch Onderzoek, Mauritskade 63, 1092 AD Amsterdam

Due to an infection of the nutrient medium with moulds there was a significant ($p = 0.05$) increase in the length, width and gibbosity of *Lemna gibba* L. plants. The *Lemna gibba* plants, which had been collected in the field in the flat form (gibbosity < 1.00 mm), were cultured in 100 ml Erlenmeyer flasks in the presence of the chelating agent EDDHA. The culturing conditions and the composition of the nutrient medium were according to DE LANGE & PIETERSE (1973). Sterilization of plants and medium was carried out in the usual way, but part of the cultures became infected in the growth cabinet. *Table 1* gives the dimensions of the infected and non-infected plants.

In the light of the findings of PIETERSE (1976) and ELZENGA et al. (1980) the

Table 1. Dimensions of *L. gibba* plants after cultivation in the laboratory on a sterile nutrient medium and on a nutrient medium infected with moulds.

Strain No.	Month	n	$\bar{L}$	δ	$\bar{B}$	δ	$\bar{G}$	δ	Mould infection
27	7	30	4.43	0.18	3.22	0.18	1.59	0.11	–
		30	5.50	0.23	4.15	0.19	1.78	0.20	+
27	7	20	4.77	0.25	3.59	0.24	1.63	0.17	–
		20	5.80	0.21	4.64	0.24	1.95	0.13	+
27	8	20	4.51	0.23	3.35	0.17	1.81	0.12	–
		20	5.66	0.30	4.46	0.28	2.87	0.23	+
28	7	20	3.91	0.11	3.05	0.19	1.57	0.16	–
		20	4.51	0.19	3.61	0.17	2.20	0.36	+

$\bar{L}$ = mean length (mm)
$\bar{B}$ = mean width (mm)
$\bar{G}$ = mean gibbosity (mm)
δ = standard deviation (mm)

observed phenomenon might be explained by the fact that moulds can produce ethylene (cf. YOUNG et al. 1951).

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