USE OF PIG SLURRY AS FERTILIZER IN POND CARP
PRODUCTION IN NORTHERN ITALY

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Abstract
During 112 days, six ponds stocked with common carp Cyprinus carpio,
were fertilised with pig slurry at three different doses: 25 (L), 50 (M) and 75
(H) kg of slurry as dry matter per hectare. Moreover fish were fed with
pelletised feed. Slurry (11% ± 1.15 as dry matter) was spread once a day for
five days a week. Water temperature, pH, dissolved oxygen, total hardness
as CaCO3, nitrates, nitrites, ammonia, phosphates as PO4, and COD, were
monitored weekly. Fish survival was 100%, 93% and 86% in treatment L, M
and H respectively. Final means weight was 470.0 ± 2.8 g (L), 407.0 ± 45.2
(M) and 358.0 ± 19.1 (H). The quantity as wet weight, of slurry spread per
day per ha was 245 kg, 491 kg and 736 kg for L, M and H treatment
respectively. The oxygen level (mg/l⁻¹) showed significant differences (P<
0.05) in L (10.08 ± 4.37) vs M (7.40 ± 4.79) and H (7.48 ± 3.18) treatments;
pH was significantly (P< 0.01) lower (7.61 ± 0.18) in L treatment than in
the others two (7.71 ± 0.16 M; 7.80 ± 0.13 H). Relatively to the others water
chemical parameters no significant differences were found.

Key words: Pig slurry, Cyprinus carpio, chemical parameters.

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