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中国对虾与海湾扇贝投饵混养的实验研究

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摘要 用放在海水池塘中的8个陆基围隔($5.0\text{ m} \times 5.0\text{ m} \times 1.8\text{ m}$)，研究中国对虾(*Penaeus chinensis*)与不同密度海湾扇贝(*Argopecten irradians*)投饵混养的放养方式、生产力和极限放养量。对虾体长($2.85 \pm 0.16\text{ cm}$)，扇贝壳长($1.10 \pm 0.12\text{ cm}$)，放养密度分别为 $6.0\text{ 尾}/\text{m}^2$ 和 $0, 1.5, 4.5, 7.5\text{ 粒}/\text{m}^2$ ，用投饵和施肥(鸡粪和化肥)饲养。结果表明，扇贝密度为0和 $1.5\text{ 粒}/\text{m}^2$ 时，对虾的成活率无显著差异。混养(扇贝 $1.5\text{ 粒}/\text{m}^2$)时对虾的出塘体长、体重和产量分别比单养高 2.5% 、 3.8% 和 6.5% ；当扇贝密度高于 $1.5\text{ 粒}/\text{m}^2$ 时，对虾的平均体长、体重和产量随扇贝密度的增加而显著减少($P < 0.05$)。扇贝密度为 1.5 和 $7.5\text{ 粒}/\text{m}^2$ 时，其产量由 $470\text{ kg}/\text{hm}^2$ 增至 $1236\text{ kg}/\text{hm}^2$ ；当扇贝密度高时，去壳后湿重占体重的百分数从($42.84 \pm 3.44\text{ \%}$)降至($37.88 \pm 4.26\text{ \%}$)。扇贝的极限放养量为 $600\sim 800\text{ kg}/\text{hm}^2$ ，适宜放养密度为 $1.0\sim 1.5\text{ 粒}/\text{m}^2$ 。

关键词 中国对虾，海湾扇贝，对虾养殖，混养，池塘