

Efficacy of PHYTOCEE® on Survivability of Vibrio Challenged Shrimps

OBJECTIVE

To evaluate effect of PHYTOCEE® on survivability of shrimp (*Litopenaeus vannamei*) challenged with *Vibrio parahaemolyticus*.

MATERIALS AND METHODS

The experimental shrimp were reared under standard rearing conditions. The shrimps were divided in to 9 groups based on different combinations of Vitamin C and PHYTOCEE® as follows; G1-1000+0 g/ton (Vit. C+PHYTOCEE®), G2-1000+1000 g/ton, G3-750+1000 g/ton, G4-500+1000 g/ton, G5-250+1000 g/ton, G6-0+1000 g/ton, G7-2000+0, G8-1000+2000 g/ton, G9-0+2000 g/ton. Shrimps in all group were challenged with *V. parahaemolyticus* (6.2X10⁵ cfu/ml) by bath treatment. The duration of treatment was 8 weeks. The survivability assessment parameter viz. survival percentage of shrimp was evaluated.

RESULTS

Effect of PHYTOCEE® on survival percentage of shrimp

Groups	CSP (Vibrio Challenge)
G1-VC+PHY (1000+0 g/ton)	43 ^c
G2-VC+PHY (1000+1000 g/ton)	53 ^{abc}
G3-VC+PHY (750+1000 g/ton)	50 ^{bc}
G4-VC+PHY (500+1000 g/ton)	47 ^c
G5-VC+PHY (250+1000 g/ton)	43 ^c
G6-VC+PHY (0+1000 g/ton)	43 ^c
G7-VC+PHY (2000+0 g/ton)	63 ^{ab}
G8-VC+PHY (1000+2000 g/ton)	67 ^a
G9-VC+PHY (0+2000 g/ton)	53 ^{abc}

VC, Vitamin C; PHY, PHYTOCEE®; CSP, Cumulative survival percentage (7 days observation)

Different letters in the same column differ significantly, p<0.05 based on least significant difference (LSD)

CONCLUSIONS

PHYTOCEE® as a top-up (2 kg/ton) with Vitamin C (1 kg/ton) resulted in better survivability of shrimp challenged with *V. parahaemolyticus* than other combinations studied.

OUTCOME

Hence, supplementation of PHYTOCEE® along with Vitamin C could be suggested for better survivability of shrimp challenged with *V. parahaemolyticus*.