

Impact of PHYTOCEE® on Survivability of WSSV Challenged Shrimps

OBJECTIVE

To evaluate the effect of PHYTOCEE® on survivability of white leg shrimp *Litopenaeus vannamei* challenged with white spot syndrome virus (WSSV)

MATERIALS AND METHODS

The experimental shrimp *Litopenaeus vannamei* were reared in pond (9.6*40*1.2 m) under standard rearing conditions. The shrimps were divided in to 6 groups viz. G1-Normal control (Basal Stay C, 500 g/ton), G2-Positive control (Basal + Top up Stay C, 500 + 1000 g/ton). G3, G4, G5, and G6 groups were supplemented with PHYTOCEE® at 100% replacement of top-up Stay C, 50% of top-up Stay C, 50% replacement of top-up Stay C, and 75% replacement of top-up Stay C respectively. Shrimps in all group were challenged with WSSV by oral inoculation of Thai-1 strain. The duration of treatment was 60 days. The survivability assessment parameter viz. survival percentage of *Litopenaeus vannamei* was evaluated.

RESULTS

Effect of PHYTOCEE® on survival percentage of *Litopenaeus vannamei*

Groups	CSP (WSSV Challenge)
G1-STC (500 g/ton)	30
G2-STC (1500 g/ton)	30
G3-STC + PHY (500+1000 g/ton)	40
G4-STC + PHY (500+500 g/ton)	60
G5-STC + PHY (1000+500 g/ton)	50
G6-STC + PHY (750+750 g/ton)	60

STC, Stay C; PHY, PHYTOCEE® ; CSP, Cumulative survival percentage (7 days observation)

CONCLUSIONS

75% replacement of top-up Stay C with PHYTOCEE® resulted in better survivability of *Litopenaeus vannamei* challenged with WSSV than other combinations studied.

OUTCOME

Hence, supplementation of PHYTOCEE® along with Stay C at 750 g/ton each could be suggested for better survivability of *Litopenaeus vannamei* infected with WSSV.