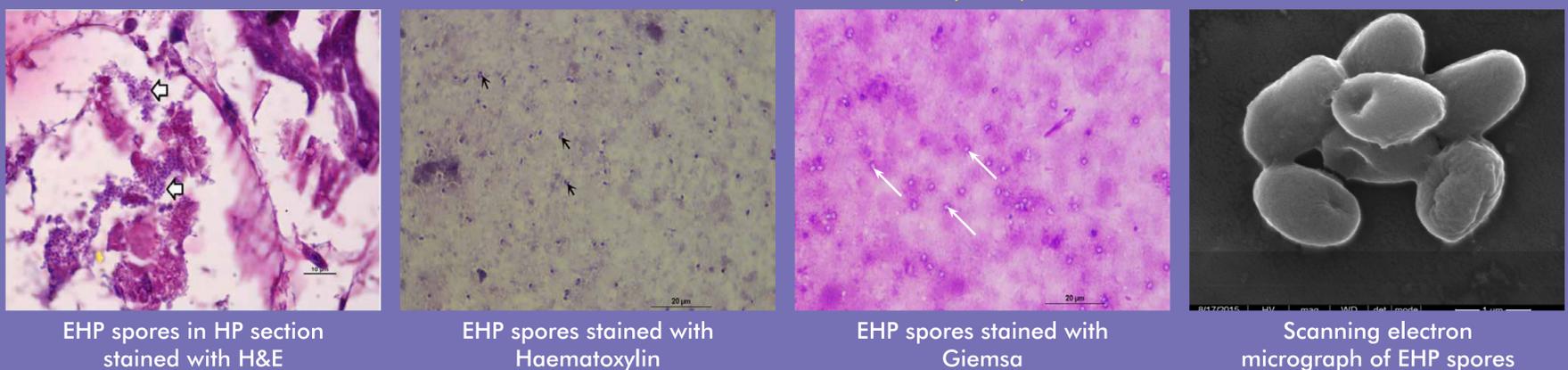


- ❖ *Enterocytozoon hepatopenaei* (EHP), an emerging microsporidian parasite is the causative agent of hepatopancreatic microsporidiasis.
- ❖ EHP has been widely reported from shrimp farming countries in Southeast Asia including Vietnam, Thailand, Malaysia, Indonesia, China and India.
- ❖ More recently, in India the epizootics of EHP has resulted in significant economic losses, in shrimp aquaculture.
- ❖ EHP infection in shrimp can not be detected by visual inspection and there are no specifically distinctive gross signs except that it is suspected to be associated with growth retardation and white faeces syndrome (WFS).
- ❖ The target organ for EHP is shrimp hepatopancreas (HP). HP being power house of the animal, infection in the digestive organ may cause impairment of metabolism, ultimately resulting in stunted growth.
- ❖ EHP infection can be transmitted horizontally, through oral route by consumption of infected tissue (cannibalism, predation etc). Vertical transmission (trans-ovum) is also a possibility.

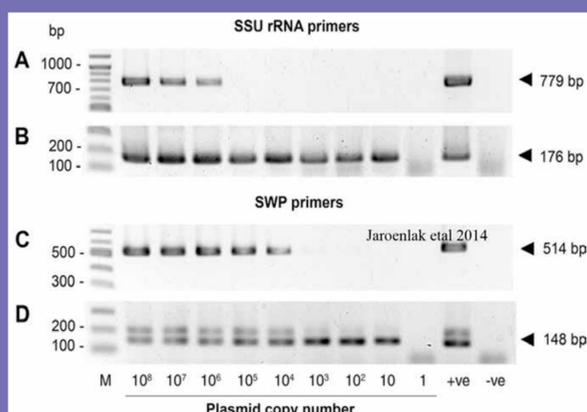


## ENTEROCYTOZOOM HEPATOPENAEI (EHP) SPORES



## DIAGNOSIS OF EHP

- ❖ EHP can be diagnosed by demonstrating characteristic spores in HP (Hepatopancreas)/ faecal matter by staining with Geimsa, Trichrome, Hematoxylin and hematoxylin and eosine (H&E tissue sections)
- ❖ EHP can be confirmed by molecular tests such as polymerase chain reaction (PCR)



## PREVENTION AND CONTROL OF EHP

- ❖ There is no specific treatment available for the control of EHP infection.
- ❖ Best management practices (BMPs) are the only way to prevent EHP.
- ❖ In hatcheries, EHP can be prevented by using EHP free live feeds and carrying out complete disinfection of hatchery facility with 2.5 % sodium hydroxide solution and by a week-long drying, followed by rinsing with acidified chlorine (200 ppm).
- ❖ In grow out system, EHP can be prevented by application 6 tons of lime (CaO) per hectare, followed by thorough ploughing and sun drying of pond soil.
- ❖ Stocking EHP free seed tested by PCR.

