

## ABSTRACT

Isognomon alatus, Crassostrea rhizophorae and Ostrea equestris all live in mangrove areas where they attach themselves to the prop roots of the Red mangrove tree, Rhizophorae mangle. They show a vertical zonation pattern on the prop roots with C.rhizophorae growing in the intertidal zone, and O.equestris subtidally. I.alatus, although more concentrated subtidally, survives well in both tidal zones. The principal factors causing this zonation are the initial settlement pattern of the I.alatus larvae mainly in the subtidal zone, the inability of O.equestris to survive tidal exposure, and the inability of C.rhizophorae to withstand competition from other fouling organisms in the subtidal zone.

The distribution of the three species in Jamaica appears to depend mainly on the salinity and suspended matter content of the water, and also the presence of a relatively unexposed shoreline. I.alatus and C.rhizophorae have very wide salinity tolerance ranges, while O.equestris prefers somewhat more marine conditions. I.alatus can withstand quite high concentrations of suspended matter in the water and are sometimes found living on muddy sea floors.

In Jamaica all three species appear to breed throughout most of the year with peak spawning periods occurring at the onset of the rainy season when there is a reduction in salinity.

Conversely periods of low spawning activity occur during the hot dry summer months when the salinity is high. The main rainy season extends from October to January, with some showers in August and in March and June.

The growth rates of these 'oysters' recorded in Jamaica are relatively high compared to those recorded at more northern latitudes, but lower than those recorded nearer the equator. Temperature is obviously an important factor affecting the growth rates of these species.

The possibilities for commercial oyster culture in Jamaica and the Caribbean are great, but much more research still has to be done in this field.