EVIDENCE OF COLD TEMPERATE OSTRACODS IN TROPICAL WATERS: MAKASSAR STRAIT AND TIMOR SEA (INDONESIA)

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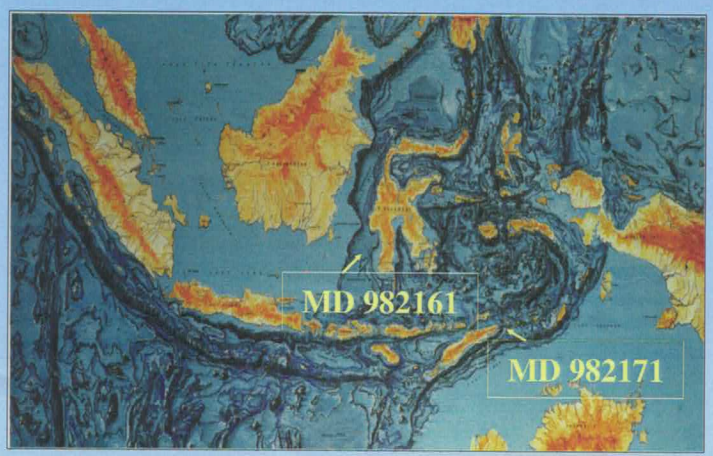
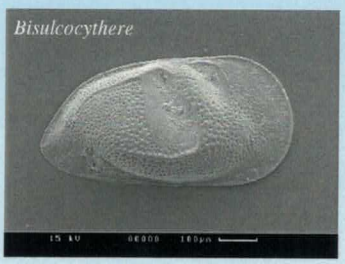
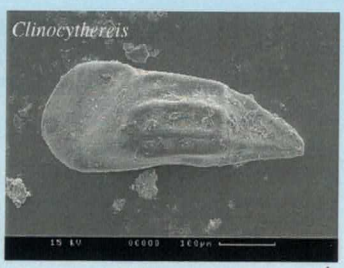


Fig. 1. Location of the two cores studied
MD 982161 (Lat. 5°12.44" S, Lon. 117°28,77"E, water depth 1185 m, core length 39,025 m)
MD 982171 (Lat. 8°29"S, Lon. 128°10"E, water depth 1768 m, core length 36,39 m)

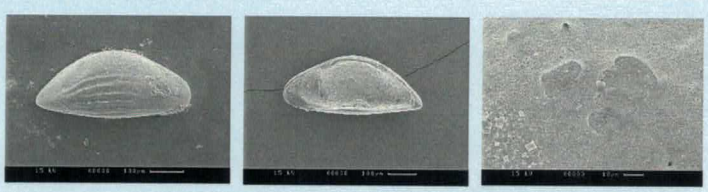
Two sediment cores from tropical waters taken during the IMAGES Cruise: Makassar Strait (MD-982161, 1185 m water depth, core length 36 m) and Timor Sea in Indonesia (MD-982171, water depth 1768m, core length 39 m) have been studied for ostracoda. The ostracods throughout the two cores show that their assemblages in 10-cm interval mostly have low to moderate diversity and abundance. The ostracods from the Makassar Strait are more diverse and abundant than the ostracods from the Timor Sea. This is due to the location of the former core, which was taken from the junction of the Sunda shelf break, the Makassar and the Flores Basins. The occurrences of two genera, *Bisulcocythere* and *Clinocythereis* in these cores are of particular interest for further studies because they typically live in cold bottom-waters off New Zealand and the southern part of Australia. Their occurrences may be related to current activities, which allowed them to migrate into tropical waters. Another reason is that these genera are not reported yet in the literature on the tropics and they may have wider distribution than previously thought.

Cold water ostracoda:
Bisulcocythere [←]
Clinocythereis [←]





Microcythere n. sp.? [←]



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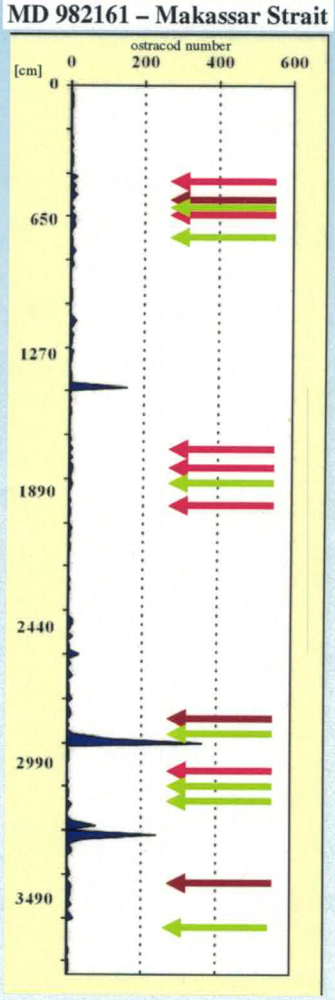
MD 982161 – Makassar Strait



MD 982171 – Timor Sea