

Origins of life may centre in EC

By **NICKY WILLEMSE**

THE Eastern Cape may have played a role in the very origins of earthly life following a recent discovery of one of the world's earliest life forms on the south of Port Elizabeth's coast.

In a handful of rock pools around the globe, the early form of life – dating back some 3.5 billion years according to fossil records – can still be found.

It is a bacteria-based system responsible for “growing” the calcified walls of coastal rock pools – and was recently

discovered in the Eastern Cape.

Regarded as the oldest type of biologically-mediated calcified formations on Earth, other rare living examples of these systems are found in Shark Bay in Australia and the Exumas in the Bahamas.

But scientists have been taken aback by the sheer number found along the coast, south of Port Elizabeth. These colonies are giving scientists a glimpse into the hydrospheric (water) conditions that prevailed at the very onset of life on earth.

“They were the only living things in those days – they disappeared with the

advent of other, more evolved organisms,” said Professor Renzo Perissinotto, who holds a research chair in shallow water ecosystems at NMMU.

“Although other rare, isolated examples of similar formations have been reported to occur from Port Elizabeth to Tofu in Mozambique, the recent discovery of numerous and closely-spaced living stromatolites on the coastline south of Port Elizabeth appears to be extraordinary ... We have discovered over 500 actively-growing marine stromatolites from Cape Recife to Storms River.”