specimens, sometimes up to 30 per cent of the total stock:

- —the days immediately following seeding are often fatal to sick oysters that were not discarded by the seeder because contamination was too recent to be evident, or which were given the benefit of the doubt;
- —lastly, many more oysters will be contaminated and die during the post-seeding phase.

Overall, up to 50 per cent of the farm's stock may be

On atolls where no oyster transfers have ever taken place, the only causes of mortality are predation and post-seeding shock which takes a variable toll depending on the seeders' skill. On these 'healthy' atolls, none of the symptoms described above have ever been observed in pearl oysters and it is very likely that the incriminated disease is of the epidemic type.

Pearl oyster transfers are now subject to an authorisation from the Ministry for the Sea, while EVAAM is preparing an atlas of atolls where pearl farming is carried on, so as to be able to delimit transfer zones and prevent spread of the disease.

Unfortunately, atolls at present producing the most spat are all affected by the disease. In addition to zoning therefore, EVAAM is endeavouring to develop collection in healthy atolls in order to protect them from unauthorised contaminated transfers, the demand of the large pearl farms exceeding by far the amount of spat these atolls can currently supply.

If the short-term commercial interests of some producers override the need to protect the healthy atolls, in a few years time, and despite the considerable efforts being made by the authorities to prevent the disease from spreading, not a single atoll in French Polynesia will be free of this disease.

## First harvest of hatchery pearls in French Polynesia

by Philippe Cabral, EVAAM, Rangiroa, French Polynesia

As part of the comprehensive pearl oyster research being conducted in French Polynesia, the Rangiroa station has been working on reproduction under artificial conditions as well as on pearl quality improvement.

Recently, it harvested the first lot of pearls ever produced by hatchery oysters. No significant difference was observed between the pearls produced by hatchery oysters and by oysters taken from the natural environment, seeded simultaneously and maintained in identical conditions after seeding.

On the basis of this very promising result, more refined studies will now be undertaken on genetics and selection of oysters for seeding.

Other pearl quality research improvement in progress at Rangiroa deals with seeding procedures (insertion zone and place of nucleus) and the influence of the carrier-shell. Future investigations will aim to find ways of reducing post-seeding mortality, which has been very high ever since the outbreak in 1984 of an unidentified disease.

Two tables of monthly pearl import statistics reported in the Weekly Shinjyu (pearl in Japanese) Newspaper were translated. The tables show the various countries exporting pearls to Japan, pearl quantities and market prices in April and May 1991/1992 in Japan.

