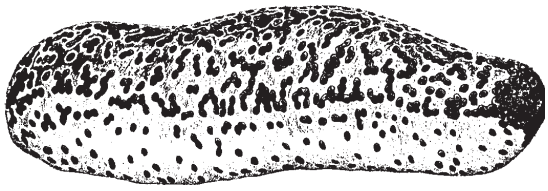
B E C H E - D E - M E R

# CORRESPONDENCE



## Newly-formed company for the beche-de-mer export business

John E.P. Langemak from the Pacific Asian Export Co. introduces his company in the following letter sent to the South Pacific Commission.

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*We are a newly formed company which will be exporting beche-de-mer from Mexico and Central America to the Asian market. We have contracted with local fishermen to supply the product and have initially located three companies in Hong Kong which are very interested in purchasing from us.*

*From research done in the library at Scripps Institute of Oceanography, La Jolla, California, we came across to your* Beche-de-mer Information Bulletin. *As we wish to conduct this venture in a responsible manner, it was deemed essential to contact your organisation.*

*The species we will be marketing is* Selenkothuria lubrica. *This species doesn't appear to be listed as an edible and marketable product in any publication we have read.*

*However, the samples we sent to Hong Kong were enthusiastically received and two companies were familiar with this type of beche-de-mer. From reading various articles and talking with several companies in regards to beche-de-mer, we have a basic understanding of processing techniques and product value.*

*What we are now searching for is specific, detailed, step-by-step drying and processing instructions, current prices and fishing management guidelines to include: maximum percentage of population to be fished at a given time, maximum time period for harvesting a given area, time needed to repropagate, mating and spawning seasons, etc.*

*We are attempting to gather as much information as possible from all sources. If you are lacking information on beche-de-mer, America's Pacific Coastal Region, we would be very happy to share what we learn.*

[Note from editor: Mr Langemak can be contacted at: Pacific Asian Export Co., 373 N. Sierra Ave., Solana Beach, CA 92075, USA. Tel: 619-259-1832. Fax: 619-481-1258]

## Royal Hawaiian Sea Farms involved in research on sea cucumbers (cont'd)

Our readers will recall the correspondence from Dale Sarver to Garry Preston, SPC and Chantal Conand that we have published in the *Beche-de-mer Information Bulletin #4*. In this issue, Dale, Director of Research with Royal Hawaiian Sea Farms, summarises (in a letter sent to Hideyuki Tanaka) the work done by his company.

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*I read the excerpts from your correspondence with Mr Yeeting in the SPC* Beche-de-mer Information Bulletin #4. *It was very interesting and I am anxious to learn more about the artificial culture of sea cucumbers. In the same volume there was some correspondence discussing the work Royal Hawaiian Sea Farms has been doing with* Stichopus horrens *and* S. japonicus *which I assume you have seen.*

*In case not, I will summarise and update it a little for you. For the last year I have been developing culture techniques for the Hawaiian* namako *by manipulating several physical and chemical parameters spawning of wild caught broodstock year round. While the Hawaiian species may exhibit some seasonality in maturation and spawning, it is to a much lesser extent than the Japanese species. While we have been able to remature and spawn animals after their initial spawning sessions, these second*

*spawns have been of low quality. So, for the present time we are using only wild caught spawners.*

*I patterned our larval culture research after the techniques developed in Japan for their species. Using* Isochrysis *as food under my rearing scheme anyway is not adequate. After experimenting with different combinations of many plankton species and management schemes we have come up with a procedure that seems reliable. We have had successful settlement of juveniles for the last 3 consecutive trials. In the last run we had survivals of over 90 per cent from ciliated embryos to doliolaria in 4 out of 6 vessels, and 72 per cent survival of those through to settled and feeding juveniles. Over 1,000 juveniles were produced in that laboratory-scale trial, and we hope to expand to larger-scale production soon.*

*We have carried out some initial grow-out trials and find they can grow very fast under some culture conditions. Some of these trials have been with only naturally occurring microfauna as food, and some have included successful applications of supplemental food. These results are encouraging and we hope to continue this work next year.*

*I am presently writing up the results of our research up to date and preparing a proposal for further research, concentrating on intensive grow-out techniques. Since most of the research has been published in Japanese and Chinese, and I cannot read either, I feel a little in the dark about what has been done, especially regarding nurseries and adult grow-out. This is why I was so interested in the information you published in the* Bulletin. *It will be a help in preparing my proposal. I would very much appreciate any additional information or papers you have on sea cucumber culture in English.*

*As I indicated in the published letters to SPC, I am also trying to arrange shipments of* S. japonicus *to Hawaii. I still have had little luck with obtaining live animals. I have written letters requesting assistance from many of the researchers in Japan with no answer. If you have any suggestions on where I could obtain some live specimens I would be grateful. If we get our research project funded I will go to Japan next year* [Note from editor: this letter was written in October' 92] *and hopefully bring back some pre-spawning adults. We have all the necessary permits to import them into Hawaii, and our business partner in Japan could assist us with the paperwork on that end.*

*We intend to expand our research to some of the higher value tropical species next year also. One other question. The information I have from Japan discusses three types of* namako, *the red, black and green. Are these all* S. japonicus*? Do they cross breed?*

[Note from editor: Dale Sarver can be contacted at: Royal Hawaiian Sea Farms, P.O. Box 3167, Kailua-Kona, Hawaii 96745. Tel: 808-329-5468. Fax: 808-326-3262]

## Seahorses and pipefishes traded with beche-de-mer: a request for help

Dr Amanda Vincent, from the Department of Zoology of the University of Oxford, is presently working on pure and applied research on seahorses and pipefishes. She suspects that beche-de-mer and seahorses may face many of the same management and conservation concerns. In a letter sent to J.P. Gaudechoux (and reproduced below) Dr Vincent requests assistance from the members of the Special Interest Group.

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*Has anybody obtained incidental information about seahorses and/or their exploitation while looking at beche-de-mer? I am investigating the exploitation of seahorses and pipefishes as traditional medicines, aphrodisiacs, curios and aquarium fishes. A recent trip to the Philippines, Taiwan, Hong Kong and Guangzhou (China) revealed that the trade is substantial and its economic value may be considerable. By far the largest market is in dried seahorses for Chinese medicines.*

*Dried seahorses and pipefishes are often traded in conjunction with beche-de-mer, since handling requirements and markets are similar. It appears that this trade may give rise to conservation concerns but more information is badly needed. I shall be grateful for any information, no matter how anecdotal or seemingly trivial.*

*As well, does anybody happen to have any preserved (alcohol or formalin) seahorse or pipefish specimens they no longer need? We are (a) trying to sort out the taxonomy of this family through molecular phylogeny work and (b) carrying out a co-evolution study of male parental care and female egg size. We need as many specimens of as many species as possible, with a particularly urgent need for animals which have only been preserved in 70% ethanol. We shall be most grateful for any specimens that can be spared. They should be sent to Dr Ingrid Ahnesjo, Department of Zoology, Villavagen 9, S-752 36 Uppsala, Sweden.*

[Note from editor: Dr Amanda Vincent can be contacted at: Department of Zoology, South Park Road, Oxford OX1 3PS, England. Fax: 44-865-310447. E-mail: avincent@vax.oxford.ac.uk]