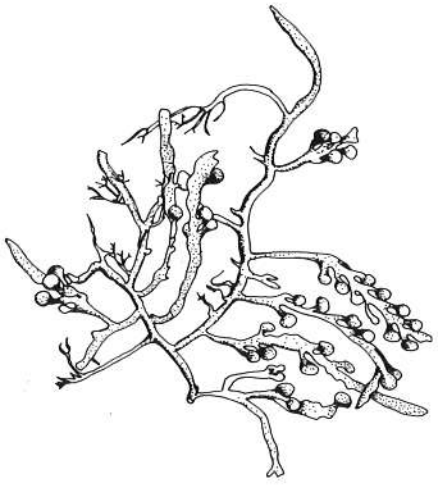
Who's Working on Caulerpa Culture?

MARCOS JOSE M. VEGA



Caulerpa, a siphonaceous, green alga of the family Caulerpaceae, is one of the few tropical marine algae under commercial cultivation. It is of minor importance as compared to *Eucheuma* or *Gracilaria* also grown in southeast Asia.

This seaweed thrives on the sandy-rocky bottoms of the upper sublittoral zone of coral reefs. It can be directly consumed by humans in salads or pickles, and studies have demonstrated the extraction of alkaloids with pharmaceutical potential.

Like the other economically important tropical marine algae, uncontrolled harvesting has seriously depleted natural stocks paving the way for aquaculture, which began almost by chance in the early 1950s. Pond cultivation of the seaweed can provide a more profitable use for marginally productive or unproductive fishponds.

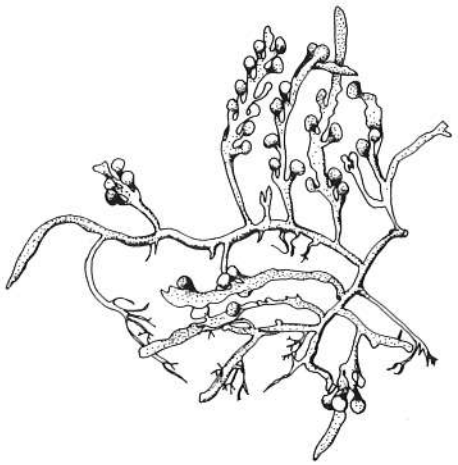
At present, *Caulerpa* is grown on a commercial scale only in the Philippines. Current markets for this seaweed are the Philippines, Japan and Denmark. (For a look at who's working on *Eucheuma*, see the January 1986 issue of Naga.)

For this article, the Aquatic Science and Fisheries Abstracts (ASFA) for 1978-1988, the ICLARM library and the professional staff collections were used for the literature survey.

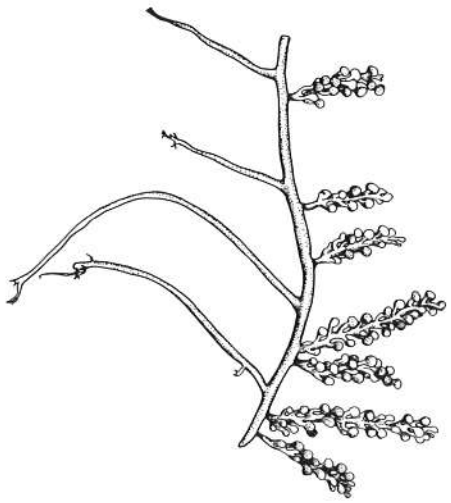
Surprisingly, we found only 13 articles on *Caulerpa* culture, the first appearing in 1976, more than a quarter century after the first cultivation efforts. Seven of the articles were from the 1980s. Papers mentioning the use of *Caulerpa* as food were excluded from this survey.

The early culture studies were from the central Philippine province of Cebu where cultivation was first demonstrated. In 1978, two articles, U. Horstmann's *Nearshore macroalgae culture in tropical developing countries* (p. 67-75), and F. Sotto's *The culture of Caulerpa racemosa in Kalawisan, Mactan Island, Cebu, Philippines: A potential for the seaweed industry* (p. 109-111), were published in vol. 15 of the Philippine Scientist. In 1983, Horstmann published in Aquaculture vol. 32 (1983):361-371 *Culture of the green algae,* Caulerpa racemosa *in tropical waters and some aspects of its physiological ecology.*

Among the recent publications are: *Seaweed culture in the Asia-Pacific region* published by the Regional Office for Asia and the Pacific, Food and Agriculture Organization of the United Nations (for copies, write: Regional Aquaculture Officer, FAO Regional Office for Asia and the Pacific, Maliwan Mansion, Phra Atit Road, Bangkok 10200, Thailand); I.R. Smith's *The economics of small-scale seaweed production in the South China Sea region* published as FAO Fisheries Circular 806 in 1987; *The biology of commercially important tropical marine algae* by C. Dawes In: *Seaweed cultivation for renewable resources.* K.T. Bird and P.H. Benson (eds). p. 155-190, published in 1987 by Elsevier Science Publishers B.V., the Netherlands; G.C. Trono, Jr. and H.L. Denilla's *Studies on the pond culture of Caulerpa* in Philippine Journal of Science Monograph No. 17 (December 1987), p. 83-98; and *Philippine seaweeds* by G. Trono, Jr. and E. Fortes published by National Bookstore, Manila, Philippines in 1988.



Some of the institutions and persons involved in *Caulerpa* culture and research are: on aspects of biology and culture, the University of the Philippines Marine Science Institute, P.O. Box 1, Diliman,



Quezon City 1101, Philippines (contact: G.C. Trono, Jr.); the Seaweed Information Center, at the same institute and address above (contact: E.G. Fortes); C.J. Dawes at the Department of Biology, University of Southern Florida, Tampa, Florida 33620, USA; M. Doty, St. John Plant Science Laboratory, Department of Botany, University of Hawaii at Manoa, Honolulu, Hawaii 96822.

ICLARM can provide more information on *Caulerpa* culture. Write to the Selective Fisheries Information Service, ICLARM, MC P.O. Box 1501, Makati, Metro Manila, Philippines for details and costs involved.