



REFERENCES

- Babcock, R.C., G.D. Bull, P.L. Harison, A.J. Heyward, J.K. Oliver, C.C. Wallace, and B.L. Willis, "Synchronous spawnings of 105 Scleractinian coral species on the Great Barrier Reef," Mar. Biol., 90, 379 - 394, 1986.
- Bak, R.P.M., and S.R. Criens, "Experimental fusion in Atlantic Acropora (Scleractinia)," Marine Biology Letters, 3, 67 - 72, 1982.
- Bak, R.P.M., R.M. Termaat, and R. Dekker, "Complexity of coral interactions : Influence of time, location of interaction and epifauna," Mar. Biol., 69, 215 - 222, 1982.
- Bernard, H.M., "Catalogue of the madreporarian corals, the genus Montipora and Anacopora", pp. 20 - 165, William Clowes and Son Ltd., London, 1897.
- Bradbury, R.H., and P.C. Young, "The race and the swift revisited, or is aggression between corals important?," Proc. 4th Int. Coral Reef Symp., (Gomez, E.D., C.E. Birkeland, R.W. Buddemeier, R.E. Johannes, J.A. Marsh, and R.T. Tsuda, eds.), pp. 351 - 356, University of Philippines, Manila, 1981.
- _____. "Coral interactions and community structure : an analysis of spatial pattern," Mar. Ecol. Prog. Ser. 11, 265 - 271, 1983.

Chornesky, E.A., "Induced development of sweeper tentacles on the reef corals Agaricia agaricites : a response to direct competition," Biol. Bull., 165, 569 - 581, 1983.

Connell, J.H., "Competitive interactions and the species diversity of corals," Coelenterate ecology and behavior.. (Mackie, G.O., ed.), pp. 51 - 58, Plenum Press, New York, 1976.

Cope, M., "Interspecific coral interactions in Hong Kong," Proc. 4th. Int. Coral Reefs Symp. (Gomez, E.D., C.E. Birkeland, R.W. Buddemeier, R.E. Johannes, J.A. Marsh, and R.T. Tsuda, eds.), pp. 357 - 362, University of Philippines, Manila, 1981.

Heyward, A.J., "Sexual reproduction in five species of the coral Montipora," Population biology of coral reefs. (Jokiel, P.L., R.H. Richmond, and R. Roger, eds.), pp. 170 - 178, Hawaii inst. Mar. Biol., Hawaii, 1985.

Heyward, A.J., and R.C. Babcock, "Self - and cross - fertilization in scleractinian corals," Mar. Biol., 90, 191 - 195, 1986.

Heyward, A.J. and J.D. Collins, "Fragmentation in Montipora ramosa: the genet and ramet concept applied to a reef coral," Coral Reefs, 4, 35 - 40, 1985.

Heyward A.J. and J.A. Stoddard, "Genetic structure of two species of Montipora on a patch reef; conflicting results from electrophoresis and histocompatibility," Mar. Biol., 85, 117 - 122, 1985.

- Hidaka, M. and K. Yamazato, "Intraspecific interactions in a scleractinian coral, Galaxea fascicularis : Induced formation of sweeper tentacles," Coral Reefs, 3, 77 - 85, 1984.
- Highsmith, R.C., "Reproduction by fragmentation in corals," Mar. Ecol. Prog. Ser., 7, 207 - 226, 1982.
- Hildemann, W.H., D.C. Linthicum, and D.C. Vann, "Transplantation and immunoincompatibility reactions among reef building corals," Immunogenetics, 2, 269 - 284, 1975.
- Hildemann, W.H., R.L. Raison, C.J. Hull, L. Akaka, J. Okamoto, and G. Cheung, "Tissue transplantation immunology in corals," Proc. 3rd. Int. Symp. Coral Reefs, (Taylor, D.L., eds.), pp. 537 - 543, University of Miami, Miami, 1977 a.
- Hildemann, W.H., R.L. Raison, C.J. Hull, L. Akaka, and J. Okamoto, "Immunological specificity and memory in a scleractinian coral," Nature, 270, 219 - 223, 1977 b.
- Hunter, C.L., "Assessment of clonal diversity and population structure of Porites compressa (Cnidaria, Scleractinia)," Proc. 5th Int. Coral Reefs Congress, (Gabric, G. and B. Salvat, eds.), pp. 69 - 74, Antenne Museum-Ephe, Tahiti, 1985.
- Johnston, I.S., P.L. Jokiel, C.H. Bigger, and W.H. Hildemann, "The influence of temperature on the kinetics of allograft reactions in a tropical sponge and a reef coral," Biol. Bull., 160, 280 - 291, 1981.

Jokiel, P., W.H. Hildemann, and C.H. Bigger, "Clonal population structure of the reef coral Montipora," Bull. Mar. Sci. 33, 181 - 187, 1983.

Lang, J., "Interspecific aggression by scleractinian corals. I the rediscovery of Scolymia cubensis (Milne Edwards and Haime)," Bull. Mar. Sci., 21, 952 - 959, 1971.

_____. "Interspecific aggression by scleractinian corals. II why the race is not only the swift," Bull. Mar. Sci., 23, 260 - 279, 1973.

Logan, A., "Interspecific aggression in hermatypic corals from Bermuda," Coral Reefs, 3, 131 - 138, 1984.

_____. "Interspecific immunological responses in five species of corals from Bermuda," Proc. 5th Int. Coral Reef. Congress, (Gabric, G., and B. Salvat, eds.), pp. 63 - 68, Attene Musuem - Ephe, Tahiti, 1985.

Nakaya, S., "Intra-and interspecific interactions in Porites (Scleractinia)," Master's thesis, Department of Biology, University of the Ryukyus, 1984.

Neigel, J.E., and J.C. Avise, "Clonal diversity and population structure in a reef building coral, Acropora cervicornis," Evolution, 37, 437 - 453, 1983.

Potts, D.C., "Growth interaction among morphological variants of the coral Acropora palifera," Coelenterate ecology and behavior. (Mackie, G.O., ed.), pp. 79 - 88, Plenum Press, New York, 1976.

Resing, J.M., and D.J. Ayre, "The usefulness of the tissue grafting bioassay as an indicator for clonal diversity in scleractinian corals," Proc. 5th. Int. Coral Reef Congress, (Gabric, G., and B. Salvat, eds.), pp. 75 - 81, Antenne Museum-Ephe, Tahiti, 1985.

Richardson, C.A., P. Dustan, and J. Lang, "Maintenance of living space by sweeper tentacles of Montastrea carvernosa, a caribbean reef coral," Mar. Biol., 55, 181 - 186, 1979.

Rinkevich, B. and Y. Loya, "Intraspecific competitive networks in the Red Sea Coral Stylophora pistillata," Coral Reefs, 1, 162 - 172, 1983.

_____. "Intraspecific competition in a reef coral : effect on growth and reproduction," Oecologia, 66, 100 - 105, 1985.

Sakai, K., and K. Yamazato, "Preliminary list of hermatypic corals around Sesoko Island, Okinawa with a note on the decrease of the species richness from 1980 to 1986," Galaxea, 6, 43 - 51, 1987.

Sheppard, C.R.C., "Interspecific aggression between reef corals with reference to their distribution," Mar. Ecol. Prog. Ser., 1, 237 - 247, 1979.

_____. "Reach of aggressively interacting corals, and relative importance of interactions at different depths," Proc. 4th. Int. Coral Reef Symp. (Gomes, E.D., C.E. Birkeland, R.W. Buddemeier, R.E. Johonnes, J.A. Marsh, and R.T. Tsuda, eds.), pp. 363 - 368, University of Philipinnes, Manila, 1981.

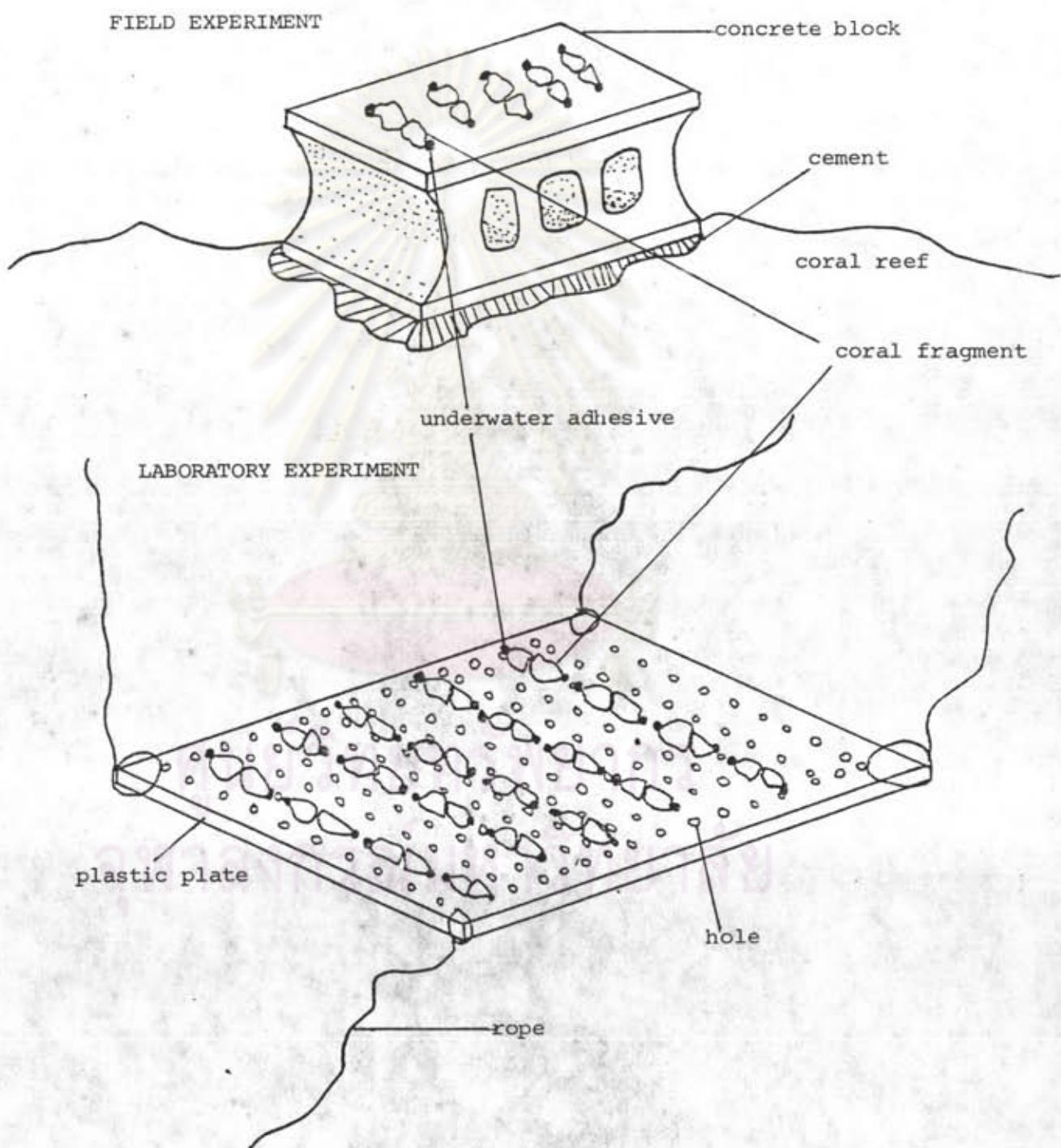
- Veron, J.E.N., and C.C. Wallace, "Scleractinia of eastern Australia V. Family Acroporidae (Veron, J.E.N., ed.), Aust. Inst. Mar. Sci. Monogr. Ser. 6, pp. 8 - 120, Australian University, Press, Canberra, 1984.
- Wellington, G.M., "Reversal digestive interactions between Pacific reef corals : mediation by sweeper tentacles," Oecologia, 47, 340 - 343, 1980.
- Willis, B. and D.J. Ayre, "Asexual reproduction and genetic determination of growth form in the coral Pavona cactus : biochemical, genetic and immunogenic evidence," Oecologia, 65, 516 - 524, 1985.
- Yamazato, K. and T. Yeemin, "Preliminary study on the inter-and intra-specific interactions among corals of Khang Khao Island, Sichang Islands, Gulf of Thailand," Galaxea, 5, 163 - 174, 1986.



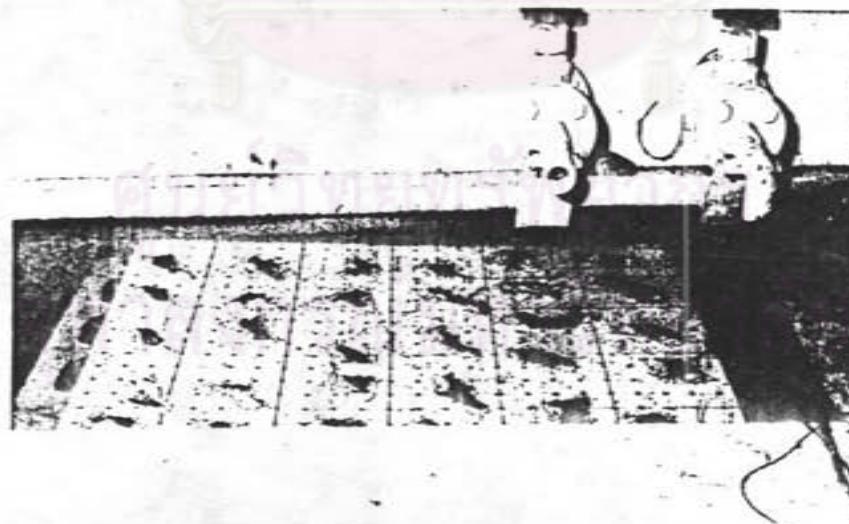
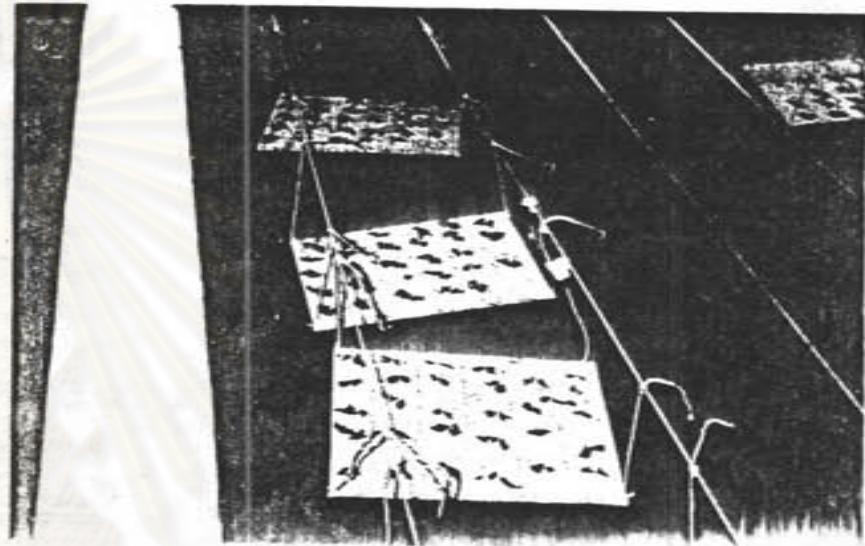
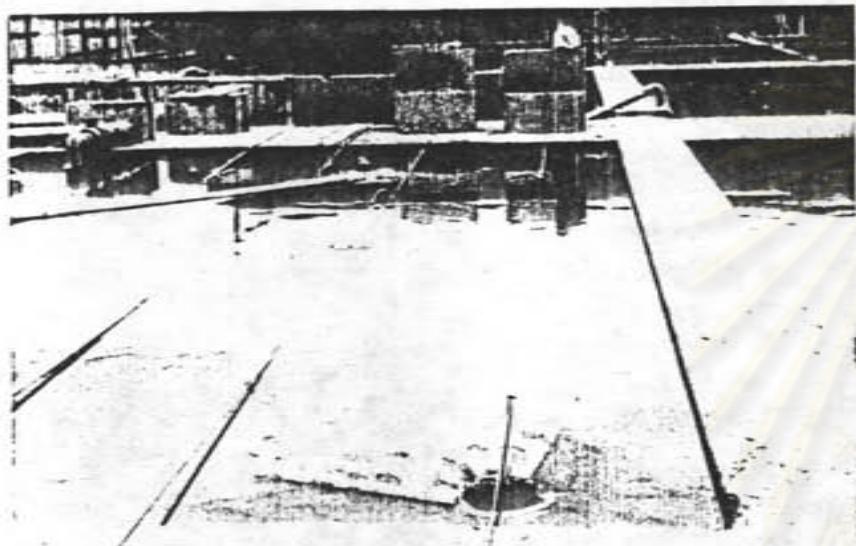
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Appendix I

Diagram showing grafting experiments

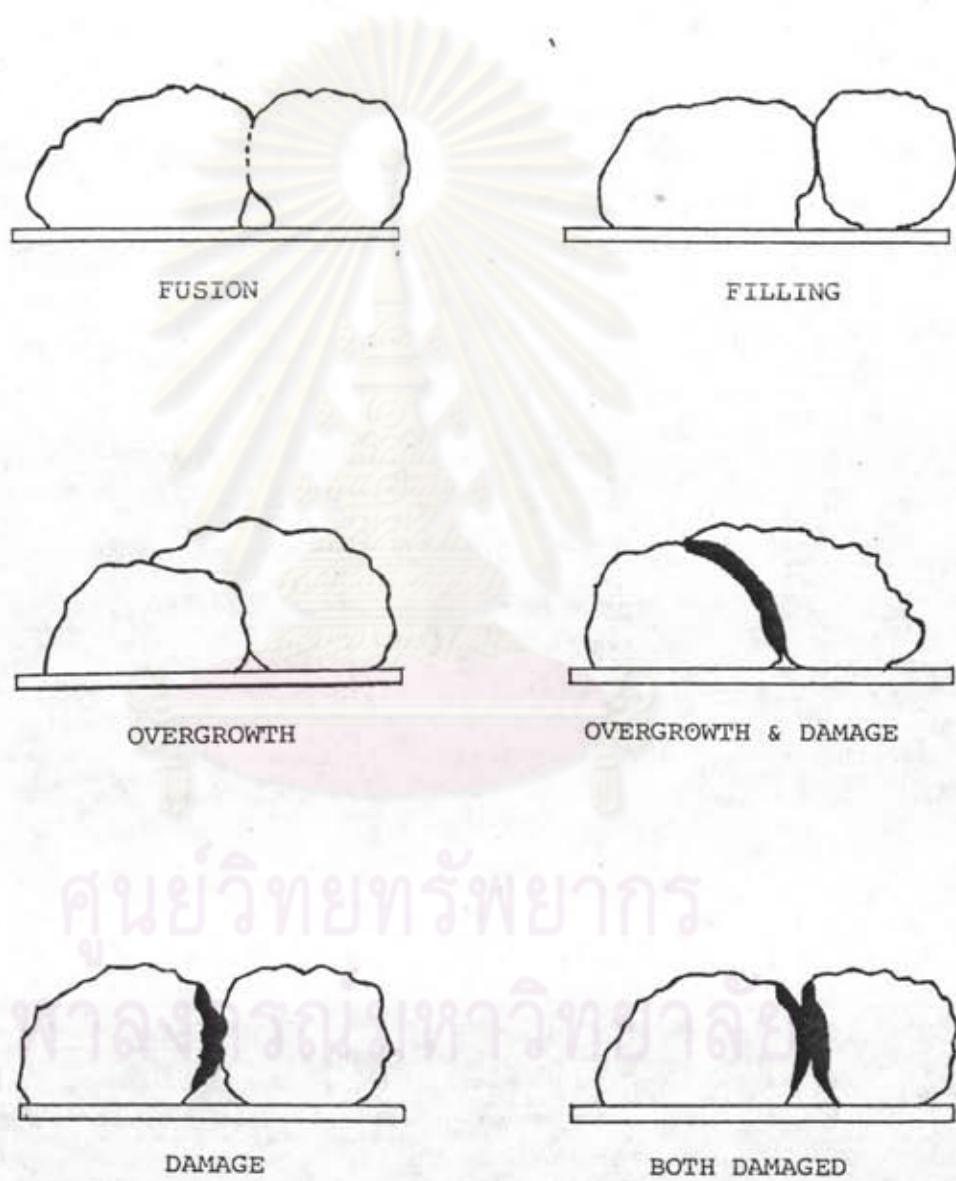


Appendix I
(continued)



Appendix II

Diagram showing type of interactions



Appendix III

The Kolmogorov-Smirnov goodness of fit test comparing the frequency of each type of interaction in the grafting experiments.

The data in Table 2 and 4 are used for analyses. NS = Non-Significant; S = Significant, $0.01 < P < 0.05$; HS = Highly Significant, $P \leq 0.01$

Grafting experiments	No. of pairs	Kolmogorov Smirnov goodness of fit test
<u>Xenografts</u>		
<u>M. foliosa - M. ehrenbergii</u>	50	HS
<u>M. foliosa (purple) - M. ehrenbergii</u>	25	NS
<u>M. foliosa - M. digitata</u>	50	HS
<u>M. foliosa (purple) - M. digitata</u>	25	NS
<u>M. foliosa - M. foveolata</u>	35	NS
<u>M. foliosa (purple) - M. foveolata</u>	25	NS
<u>M. ehrenbergii - M. digitata</u>	50	NS
<u>M. ehrenbergii - M. foveolata</u>	50	NS
<u>M. digitata - M. foveolata</u>	50	S
<u>Allografts</u>		
Intra-reef allografts		
<u>M. foliosa</u>	(A)	44
	(G)	46
	(L)	43
	(M)	44
<u>M. ehrenbergii</u>	(B)	50
	(H)	50
	(I)	44
<u>M. digitata</u>	(C)	39
	(J)	37
	(K)	41

Appendix III (cont.)

Grafting experiments	No. fo pairs	Kolmogorov Smirnov goodness of fit test
Inter-reef allografts		
<u>M. foliosa</u> (A - D)	17	NS
(A - E)	24	NS
(M - D)	22	S
<u>M. ehrenbergii</u> (B - F)	23	NS
(I - F)	22	NS
<u>M. digitata</u> (C - N)	24	HS
(J - O)	20	NS
Across-island allografts		
<u>M. foliosa</u>	23	NS
<u>M. ehrenbergii</u>	25	NS
<u>M. digitata</u>	22	HS
Inter-morph allografts		
<u>M. foliosa</u> - <u>M. foliosa</u> (purple) (I)	25	NS
(II)	20	S

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