

an ecological community of the marine intertidal zone. *Proc. natn. Acad. Sci. U.S.A.*, 82(11):3707-3711. Hopkins Mar. Sta., Stanford Univ., Pacific Grove, CA 93950, USA.

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Jernakoff, P., 1985. **Interactions between the limpet *Patelloida latistrigata* and algae on an intertidal rock platform.** *Mar. Ecol.-Prog. Ser.*, 23(1):71-78.

P. latistrigata grazed on propagules of all algae, even species previously reported to be unaffected by grazing. High diversity of algae in ungrazed areas was due to the abundance of microscopic propagules. Although limpets survived on macroalgae they tended to migrate to bare rock and grazed on microalgae. Large germlings of ephemeral algae were not efficiently digested but could support limpet survival. Although *P. latistrigata* is a generalist grazer of microalgae, its microalgal grazing is not obligatory. CSIRO Mar. Lab., P.O. Box 20, North Beach 6020, WA, Australia.

85:7236

Mori, Keisuke, Shirou Nishihama and Masao Tanaka, 1985. **Community structure of a rocky shore in Tsuji-shima Island, Amakusa [Japan].** III. The analysis of relationships between distribution of organisms and micro-topographical conditions using small quadrats. *Publs Amakusa mar. biol. Lab., Kyushu Univ.*, 8(1):43-63.

To examine the relationship between the distribution patterns of dominant species and micro-topographical factors such as the angle of inclination (7 categories), rock surface conditions (presence of grooves, pits, step, tide-pools, gravel and smooth surfaces), tide level and wave exposure, 11 dominant species were selected. Certain trends in the selectivity of inclination were seen: *Chthamalus challenger* were abundant on the upper part of the rock surface, while *Tetraclita squamosa*, *Reishia clavigera* and *Onchidiella kurodai* were abundant on the under-surface of rocky projections. Eight species tended toward selectivity of surface conditions. Amakusa Mar. Biol. Lab., Kyushu Univ., Tomioka, Reihokucho, Amakusa, Kumamoto-ken 863-25, Japan.

85:7237

Mori, Keisuke, Masao Tanaka and Shirou Nishihama, 1985. **Community structure of a rocky shore in Tsuji-shima Island, Amakusa [Japan].** II. Vertical distribution of dominant species and its zonation pattern. *Publs Amakusa mar. biol. Lab., Kyushu Univ.*, 8(1):27-41.

An isolated rock was selected for comparing species composition and distribution patterns of dominant

species on both exposed and sheltered sides. Mollusca was the most dominant taxon, Cirripedia the most dominant group. Based on distribution patterns, the intertidal zone could be divided into a *Chthamalus challenger* zone with low species diversity, a *Tetraclita squamosa japonica* zone with high diversity, a low coverage zone occupied by only a few limpets and chitons, and a calcareous red algae zone with high coverage. Community structure was characterized by the dominance of *C. challenger* and a low percentage of rock surface utilization. Amakusa Mar. Biol. Lab., Kyushu Univ., Tomioka, Reihoku-cho, Amakusa, Kumamoto-ken, 863-25, Japan.

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Nair, N.B., K. Dharmaraj, P.K.A. Azis, M. Arunachalam and K.K. Kumar, 1984. **A study on the ecology of soft bottom benthic fauna in Kadinamkulam Backwater, southwest coast of India.** *Proc. Indian natn. Sci. Acad.*, (B)50(5):473-482. Dept. of Aquat. Biol. and Fish., Univ. of Kerala, Trivandrum 695007, India.

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Nienhuis, P.H. and B.H.H. De Bree, 1984. **Carbon fixation and chlorophyll in bottom sediments of brackish Lake Grevelingen, The Netherlands.** *Neth. J. Sea Res.*, 18(3-4):337-359.

Based on C-14 fixation experiments, a tentative estimate of net microphytobenthos primary production for the entire lake was 35 g C/m² in 1979 and 32 g C/m² in 1980. Chlorophyll *a* in the upper 1 cm of the bottom ranged between 20 and 400 mg/m²; within year and year-to-year (1977-1980) variations were large. Both C-14 and O₂ exchange methods have serious drawbacks for benthic systems. Delta Inst. for Hydrobiol. Res., Vierstraet 28, 4401 EA Yerseke, Netherlands. (mwf)

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Potts, D.C., T.J. Done, P.J. Isdale and D.A. Fisk, 1985. **Dominance of a coral community by the genus *Porites* (Scleractinia).** *Mar. Ecol.-Prog. Ser.*, 23(1):79-84.

On the leeward margin of Pandora Reef (Great Barrier Reef) 7 species of massive *Porites* physically dominate the coral community. The populations of commoner species are themselves dominated, demographically and genetically, by a few persistent genotypes. Five percent of colonies contain 52% of skeletal CaCO₃; 9% of colonies have 50% of living tissues. The largest colony is at least 677 yr old. Genotypic ages of tissues may be considerably greater. Biol. Dept. and Center for Mar. Stud., Univ. of Calif., Santa Cruz, CA 95064, USA.