

S3 BIO Topic Session

Role of gelatinous zooplankton in coastal and oceanic ecosystems

Session Convenors: *Richard D. Brodeur (U.S.A.) and Jun Nishikawa (Japan)*

Recent increases in gelatinous zooplankton in a number of ecosystems in the North Pacific and elsewhere have demonstrated the importance of these organisms in energy transfer in coastal and oceanic environments. Gelatinous zooplankton exhibit rapid individual and population growth rates and have been shown to be major consumers of phytoplankton, zooplankton and early life stages of fishes. They are competitors with adult fishes and serve as conduits of energy transfer to the deep ocean. Despite their importance to the ecosystem, there are substantial gaps in our knowledge of basic life history, ecology, and environmental responses, even for many of the dominant species. This session will bring together information on such diverse gelatinous taxa as cnidarians, ctenophores, siphonophores, salps, and appendicularians and examine their role in marine ecosystems and their responses to variable environmental conditions.

Wednesday, October 20, 2004 8:30-12:10

- 08:30-09:00 **William M. Hamner** (Invited)
Gelatinous animals at sea: Convergent evolution and sampling problems (S3-2095)
- 09:00-09:20 **Jennifer E. Purcell**
Climate effects on jellyfish populations: A review (S3-1899)
- 09:20-09:40 **Mary Needler Arai**
Predation on pelagic coelenterates (S3-1824)
- 09:40-10:00 **Cynthia L. Suchman, Elizabeth Daly, Julie E. Keister, William T. Peterson and Richard D. Brodeur**
Predation by the scyphomedusa *Chrysaora fuscescens* in the northern California Current (S3-1865)
- 10:00-10:30 **Coffee break**
- 10:30-10:50 **Evgeny A. Pakhomov**
Long-term changes in salp distribution in a polar ecosystem: Some like it hot (S3-1898)
- 10:50-11:10 **Russell R. Hopcroft and Cheryl Clarke**
Community composition and production of larvaceans in the Northern Bering Sea (S3-1883)
- 11:10-11:30 **Kiyotaka Hidaka and Kaoru Nakata**
Appendicularians around Kuroshio in winter-spring (S3-1961)
- 11:30-11:50 **Michael Dagg, H. Liu, R. Sato, J. Armstrong and L. Haldorson**
Trophic roles of larvaceans in the coastal regions of the Gulf of Alaska (S3-1979)
- 11:50-12:10 **Marsh Youngbluth, Charles Jacoby, Francesc Pages, Franz Uiblein and Per Flood**
A comparison of predatory habits of the physonect siphonophore *Nanomia cara* in coastal basins (Wilkinson and Georges, Gulf of Maine) and deep-water canyons (Oceanographer and Hydrographer) (S3-1930)

Posters

Pei-Kai Hsu, Wen-Tseng Lo and Ming-An Lee

Seasonal distribution of siphonophores in relation to the water masses in the East China Sea, north of Taiwan (S3-1908)

Atsushi Kaneda and Hidetaka Takeoka

Relationship between short-term increases of gelatinous zooplankton and physical environments in the near shore area of Iyo-Nada, Japan (S3-1916)

Young Shil Kang, Hye Eun Lee, Soo Jung Chang and Min Ho Son

Predation pressure of some fishes on *Aurelia aurita* (Scyphozoa: Semaestomeae) (S3-2129)

Young Shil Kang, Min Ho Son, Soo Jung Chang and Hye Eun Lee

New finding on young *Nemopilema nomurai* (Scyphozoa: Rhizostomeae) in the western coastal area of Korea (S3-2127)

Takeshi Kohama, Shinya Nagano, Noboru Okuda, Hitoshi Miyasaka and Hidetaka Takeoka

Estimation of ecological role and trophic level of jellyfish *Aurelia aurita* using stable isotope ratios in the Uwa Sea, Japan (S3-1921)

Shinya Magome, Tomohiro Yamashita, Takeshi Kohama and Hidetaka Takeoka

A study on jellyfish patch formation using aerial photography (S3-1923)

Shwu-Feng Yu, Wen-Tseng Lo, Wei-Cheng Su and Don-Chung Liu

Winter distribution of siphonophores (Cnidaria) in the waters surrounding Taiwan (S3-1909)

Evgeniy N. Ilynskiy and Alexander V. Zavolokin

Abundance and distribution of jellyfishes in epipelagical of the Okhotsk Sea (S3-1838)