

Scientific Reports
of the
Hokkaido Fisheries Experimental Station

No. 1 - 10

Contents

No. 1 (March, 1963)

Report No.		
A 1	WAK X O, Makoto and KOJIMA, Iori : On the oceanographic conditions in the south-western region of the Okhotsk Sea. (2)	1
A 2	TAMOTO, Kaoru and TANAKA, Syhu : Studies on freezing and refrigeration of marine products (III). Denaturation of muscle protein during defrosting of frozen fish (1).....	13
A 3	TAMOTO, Kaoru : Studies on freezing refrigeration of marine products (IV). On the undercooling preservation of fish muscle (1).....	20
A 4	OKUDA, Yukio and SATO, Teruhiko : Studies on fungi isolated from marine products. I. Seasonal fluctuation of fungi in manufacturing of smoked squid...26	
A 5	OKUDA, Yukio and SATO, Teruhiko : Studies on fungi isolated from marine products. II. Influence of seasoning on the growth of fungi isolated from smoked squid	33
A 6	OKUDA, Yukio, TAKEYA, Hiroshi and KON, Kanekichi : Effects of the phosphates on the manufacturing process of squid. III. On the seasoned and dried squid	43
A 7	SATO, Teruhiko and OKUDA, Yukio : Studies on species of fungi isolated from marine products. I. On fungi from smoked squid	61
A 8	NISHIYA, Kyosuke and IKAWA, Kikuo : On a method of protection against deterioration during the making of salted-dried Alaska-pollack fillets in summer	73
A 9	KITABAYASHI, Kunitsugu, SHUDO, Katsuo, NAKAMURA, Kunisuke and ISHIKAWA, Senji : Preteolytic hydrolysis or digestion of aquatic animal meats. On the bitterness in animal meat products.....	88

No. 2 (February, 1964)

A 10	SAKAI, Yoshio and FUNANO, Takashi : Observation on the female gametophytes	
------	--	--

	and the microscopic sporophytes of <i>Laminaria religiosa</i> from Oshoro Bay, Hokkaido, Japan	1
A 11	HAYASHI, Tadahiko and TERAJ, Katsuji: Study on the larvae and youngs of Japanese surf clam, <i>Spisula</i> (S.) <i>sachalinensis</i> (Schrenck), at Shikuzu, Muroran City. I. Taxonomy of the pelecypoda's veliger larvae in plankton...	7
A 12	KAWAMURA, Kazuhiro: Ecological studies on sea urchin, <i>Strongylocentrotus intermedius</i> , on the coast of Funadomari in the north region of Rebun Island	39
A 13	TAMOTO, Kaoru: Studies on vacuum freeze-drying of marine products (1). On the deterioration of freeze-dried muscle	60
A 14	TAMOTO, Kaoru,, TAKEDA, Fumio and NISHIYA, Kyosuke: Studies on freezing of "Surimi" (fish paste) and its application (7). On the relationship of freshness and freezing denaturation of protein	71
A 15	SATO, Teruhiko and OKUDA, Yukio: Studies on species of fungi isolated from marine products. II. On fungi from marine products of all kinds	79
A 16	OKUDA, Yukio, TAKEYA, Hiroshi and KON, Kanekiti: Studies on the prevention of browning of salted and dried Alaska-pollack fillets during preservation (1).....	87
A 17	KITABAYASHI, Kunitsugu, NAKAMURA, Kunisuke, SHUDO, Katsuo and ISHIKAWA, Senji: Studies on the removal of skin from squid meat.....	93
A 18	NAKAMURA, Kunisuke and KITABAYASHI, Kunitsugu: Studies on the possibility for extracting glue from squid skin	99

No. 3 (March, 1965)

A 19	KONDO, Heihachi: On the condition of herring (<i>Clupea pallasii cuvier et Valenciennes</i>) in waters around Hokkaido and Sakhalin during recent years	1
A 20	KAWAMURA, Kazuhiro: Ecological studies on the sea urchin, <i>Strongylocentrotus intermedius</i> , on the coast of Funadomari in the north region of Rebun Island. II.....	19
A 21	SAKAI, Yoshio and FUNANO, Takashi: The young sporophyte of <i>Laminaria</i> from Hokkaido, Japan, I. On young sporophytes of <i>Laminaria religiosa</i> and <i>L. japonica</i>	39
A 22	SAWASAKI, Michitaka, TORII, Shigeki and NAKAMURA, Kunisuke: Studies on cultural grounds of laver in the flat reef of Moheji. Relation between nutrient constituents in the sea water and quality of laver	51
A 23	TAMOTO, Kaoru: Studies of muscle of aquatic animals. III On Kamaboko forming ability of Saury pike muscle	57
A 24	TAMOTO, Kaoru: Studies on freezing and refrigeration of marine products.	

	V On the prevention of drip and spongezation of the frozen Alaska-pollack muscle	67
A 25	SATO, Teruhiko : Studies on fungi isolated from marine products. VII Fungi isolated from seasoning. (1).....	82
A 26	SATO, Teruhiko : Studies on fungi isolated from marine products. VIII Fungi isolated from seasoning. (2) On influence of osmotic pressure of fungi isolated from sugar	93
A 27	OKUDA, Yukio : Studies on fungi isolated from marine products. IX The influence of removal of oxygen on the growth of fungi isolated from sugar and smoked squid	105

No. 4 (November, 1965)

A 28	UENO, Tatsuji : The stromateid fishes (Suborder Stromateoidei) captured from the waters of Hokkaido.....	1
A 29	ABE, Koji : Studies on a prawn (<i>Pandalopsis coccinata</i> Urita) off the coast of Kushiro, Hokkaido, I. Breeding	13
A 30	KAWAMURA, Kazuhiko and TAKE, Jyo : Ecological studies on the sea urchin, <i>Strongylocentrotus intermedius</i> , on the coast of Funadomari, in the north region of Rebun Island. (III)	22
A 31	OKUDA, Yukio and KON, Kanekiti : Studies on the utilization of squid meat. I. The removal of the skin from squid by the use of proteinase. (1).....	41
A 32	TAKEYA, Hiroshi, KON, Kanekiti and OKUDA, Yukio : Studies on the utilization of squid meat. II. The manufacture of Kamaboko from squid meat. (1).....	47
A 33	SATO, Teruhiko : Studies on fungi isolated from marine products. X. Influence of pH on the growth of fungi isolated from sugar	55
A 34	SATO, Teruhiko : Studies on fungi isolated from marine products. XI. Influence of sorbic acid on the growth of fungi isolated from sugar.....	60
A 35	SATO, Teruhiko : Studies on fungi isolated from marine products. XII. The influence of the fungi spores in seasonings upon the growth of fungi on smoked squid.....	65

No. 5 (March, 1966)

A 36	YAMASHITA, Yutaka : The life of "Ishigarei" (<i>Kareius bicoloratus</i> [Bashilewsky]) in the spawning season with remarks on its stock condition in in Ishikari Bay, Hokkaido	1
A 37	KAWAMURA, Kazuhiro : Ecological studies and some discussions about the methods of conservation of the sea urchin, <i>Strongylocentrotus nudus</i> , on the coast of Urakawa, Hokkaido	7

- A 38 SAKAI, Yoshio and NAKATSU, Toshiyuki : The young sporophytes of *Laminaria* from Hokkaido, Japan. II. On the young sporophytes of *Laminaria ochotensis*.31
- A 39 SAKAI, Yoshio and NAKATSU, Toshiyuki : On *Laminaria ochotensis* MIYABE growing on artificial Laminaria-beds on the shores of Wakkanai, Hokkaido, Japan36
- A 40 SATO, Teruhiko : Studies on fungi isolated from marine products. XIII. Effective usage of antifungal material (1) Influence of saccaroid and inorganic salts on the preventive effect of sorbic acid45
- A 41 SATO, Teruhiko and FUNAOKA, Teruyuki : Studies on fungi isolated from marine products. XIV. Studies on the effect of squid extractive matter on the growth of fungi55
- A 42 NAKAMURA, Masayoshi, KIDA, Kenji and HIDESATO, Takatoshi : Studies on the white flour appearing on the surface of the smoked and seasoned "Hokke" (*Pleurogramus Azonus*)61

No. 6 (October, 1966)

- A 43 OHSHIMA, Kazuo, WATANABE, Hiroshi, SATAKE, Toshitaka, SHIOZAWA, Takayuki, OBARA, Akio, and MARU, Kuniyoshi : Ecological study of Lake Saroma, Hokkaido 1
- A 44 MIKAMI, Shoichi and TAMURA, Masaki : Studies on the population of "Hirame" flounder (*Paralichthys olivaceus* T. & S.) of the Japan Sea coast of Hokkaido. I. Result of the tagging experiment made in 196433
- A 45 KAWAMURA, Kazuhiro : On the age determining character and growth of a sea urchin *Strongylocentrotus nudus*56
- A 46 SATO, Teruhiko : Studies on fungi isolated from manufactured marine products. XV. Effective usage of antifungal materials. (2) Effect of combinations of sorbic acid and sodium chloride to the growth of fungi62

No. 7 (March, 1967)

- A 47 TOMITA, Kyoji : The maturation of the ovaries ^{of} the abalone, *Haliotis discus hannai* INO, in Rebun Island, Hokkaido, Japan 1
- A 48 HAYASHI, Tadahiko, TERAJ, Katsuji and ARIMA, Kenji : Studies on the planktonic larvae and young shells of japanese surf clam, *Spisula sachlinensis* (SCHRENCK), on the coast of Yakumo, Oshima Prov., Hokkaido 8
- A 49 MARU, Kuniyoshi and OBARA, Akio : Studies on the ecology of the scallop, *Patinopecten yessoensis* (JAY). I. On the growth and annual ring formation of the shell72

No. 8 (October, 1967)

- A 50 FUNANO, Takashi and SAKAI, Yoshio : Ecological studies on 2-year-old *Laminaria religiosa* prox. growing on the coast of Oshoro Bay, Hokkaido, Japan 1
- A 51 NAKAMURA, Masayoshi and FUKUMI, Toru : Studies on the coloration of fish eggs III Observations on the color tone of herring roe38

No. 9 (September, 1968)

- A 52 KOBAYASHI, Takashi, WAKO, Makoto and NAITO, Masaji : Studies on the life of the pacific saury, *Cololabis saira* (BREVOORT). I. Aggregative characteristics of adult of the autumn-spawning population..... 1
- A 53 KOJIMA, Iori and YORITA, Takashi : On the relative efficiency of traps with different mesh sizes for catching pink shrimp, *Pandalus borealis* Kröyer...46
- A 54 TOMITA, Kyoji : The testis maturation of the abalone, *Haliotis discus hannai* INO, in Rebun Island. Hokkaido, Japan.....56
- A 55 OKUDA, Yukio : Effects of different additives to prevent unpleasant odors during storage of squid livers or liver residue62

No. 10 (February, 1969)

- A 56 SASAKI, Shigeru : An ecological study of *Laminaria angustata* var. *longissima* (M.) MIYABE on the coast of Kushiro Prov., Hokkaido 1
- A 57 FUNANO, Takashi : Observation on the female gametophytes and the microscopic sporophytes of *Laminaria religiosa* MIYABE43
- A 58 ARIMA, Kenji and HAYASHI, Tadahiko : Studies on the young shells of Japanese surf clam, *Spisula sachalinensis* SCHRENCK, on the coast of Yakumo. Oshima Prov., Hokkaido51

