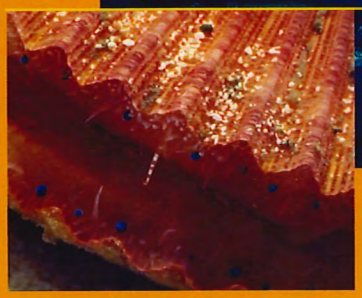
Seafood

THE GOOD FOOD II



Oil profiles for further Australian seafoods, and influencing factors

B.D. Mooney, P.D. Nichols and N.G. Elliott

FRDC Project 1999/331

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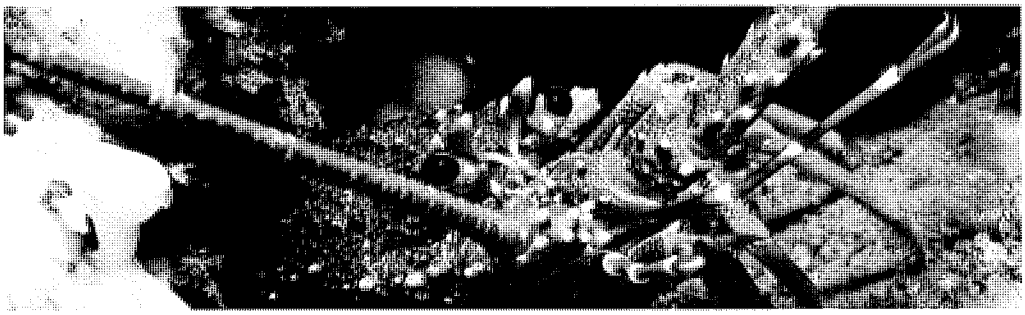
Contents

Chapter 1



Seafood the Good Food II
Introduction

Seafood the Good Food II – Introduction

Australians increased their seafood intake during the 1990s, encouraged by nutritionists and medical authorities keen to promote the high levels of nutritionally-important omega-3 polyunsaturated fatty acids (PUFA) contained in seafood oils.

Seafood the Good Food II summarises CSIRO research into factors that may influence the 'good oils' we consume, such as how seafood is produced, and how it is prepared for consumption. The oil content and composition of 79 seafood species is also outlined, providing a companion volume to *Seafood the Good Food*, which reported on 189 Australian finfish and shellfish.

The information is intended to help the seafood industry, nutritionists and consumer groups to communicate the health benefits of eating wild-caught and farmed Australian seafood.

Seafood oils

In seafood, oils are the second largest component after protein. The most important seafood oils are triglycerides, which serve as an energy store, and polar oils and cholesterol, which are structural components of cell membranes.

The main components of seafood oils are saturated and unsaturated fatty acids. EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid) are the main beneficial long-chain omega-3 PUFA. AA (arachidonic acid) is an omega-6 PUFA, a precursor of prostaglandins (modulators of hormone activity) and other eicosanoids (physiologically active compounds). The human body manufactures only small amounts of these PUFA, so we need to source them from our diet.

Omega-3 PUFA from seafood oils have a wide range of potential health benefits, particularly in preventing coronary heart disease, stroke and rheumatoid arthritis. They also may guard against some forms of cancer, and promote infant brain and retina function and development. Detailed information on these health benefits is available in *What's so healthy about seafood? A guide for seafood marketers.*

Summary of research findings

Seafood the Good Food and *Seafood the Good Food II* are based on the results of two studies by CSIRO Marine Research (see references). Here are the key findings.

- Relative to other food groups, wild-caught, cultured and value-added seafood are the best and most readily available source of EPA and DHA.
- Most Australian finfish have high levels of omega-3 PUFA (average 235 mg/100 g; range 13 to 3760 mg/100 g) and low levels of cholesterol (average 28 mg/100 g).
- Prawns have lower levels of omega-3 PUFA (average 130 mg/100 g) and higher levels of cholesterol (average 130 mg/100 g) than fish.
- Australian fish generally have higher relative levels of DHA than fish from the Northern Hemisphere.
- Fish from warmer waters generally have lower omega-3/omega-6 ratios than fish from temperate waters, largely due to higher relative levels of AA.
- Finfish generally contain polar oil and/or triglyceride, although a few species have an unusually high content of wax ester, hydrocarbon or diacylglyceryl ether.
- Aquafeeds can be tailored to optimise omega-3 PUFA content in cultured (farmed) seafood.
- Cooking and processing have no discernable effects on the content and composition of omega-3 PUFA in seafood.

Methods

Sample collection

Commercially important finfish and shellfish species were selected in consultation with seafood industry and state fisheries managers. Most samples were provided through the *Australian Seafood Handbook* project. Others were sourced from commercial fishers, aquaculture farms, research facilities and cruises, and seafood markets.

White muscle (flesh) tissue was sampled immediately after capture, after purchase, or after being sent, frozen, to the laboratory. For most species, 5–10 animals were available, from which three were randomly selected for analysis. All finfish muscle samples were taken from the right 'shoulder' region, an area normally included in a fillet. In Atlantic salmon, the oil profile of this sample region was compared with other parts of the fillet (Chapter 3, pages 24 and 25). Skin and subcutaneous fat were excluded. Samples were taken from the abdomen (or tail) of crustaceans, the mantle of cephalopods, either the whole body or foot of univalves, and the adductor muscle of bivalve molluscs. All tissues were frozen until analysed.

Sample preparation and analysis

Briefly, oil (fat) was extracted with solvents and the fatty acid fractions prepared from a portion of the oil. The fatty acids were analysed using gas chromatography and mass spectrometry, techniques used routinely for detecting and identifying drugs in medical research. The sample preparation and analysis methods used here are detailed in Nichols *et al.* (1998b and 2002).

Abbreviations

AA Arachidonic acid, 20:4ω6, also termed 20:4(n-6).

CSIRO Commonwealth Scientific and Industrial Research Organisation.

DHA Docosahexaenoic acid, 22:6ω3, also termed 22:6(n-3).

EPA Eicosapentaenoic acid, 20:5ω3, also termed 20:5(n-3).

FRDC Fisheries Research and Development Corporation.

MUFA Monounsaturated fatty acids containing one carbon-carbon unsaturated centre, generally with *cis* configuration: for example, oleic acid [18:1ω9c, also termed 18:1(n-9)c].

n-3 Polyunsaturated acids with two or more *cis*-unsaturated centres, separated from each other by one methylene group and having the first unsaturated centre located three carbons distant from the end methyl. Also termed omega-3.

n-6 Polyunsaturated acids with two or more *cis*-unsaturated centres, separated from each other by one methylene group and having the first unsaturated centre located six carbons distant from the end methyl. Also termed omega-6.

PUFA Polyunsaturated fatty acids (see also n-3 and n-6).

SAT Saturated fatty acids without carbon-carbon unsaturation: for example, myristic (14:0) and palmitic (16:0) acids.

Explanation of results and definitions (Chapters 2 and 3)

- Oil (fat) content is expressed as a percentage (%) of the wet mass of flesh.
- Low oil content is defined as less than 2%, moderate oil content as 2–5%, and high oil as more than 5%.
- The content of the major PUFA – arachidonic acid (AA), eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA) – is expressed as milligrams per 100 gram wet mass of flesh (in each horizontal bar).
- The average relative percentages of fats in seafood – saturated fatty acids (SAT), monounsaturated fatty acids (MUFA) and polyunsaturated fatty acids (PUFA) – are expressed as a percentage of the total fatty acids.
- All data presented for fishes are for flesh without skin and are generally the average of three specimens. Variation may exist between individual specimens, and is generally higher for species with higher oil contents.
- A wider discussion of the results summarised in these graphs and tables can be found in Nichols *et al.* (1998b and 2002).

Chapter 2

The oil composition of cultured seafood

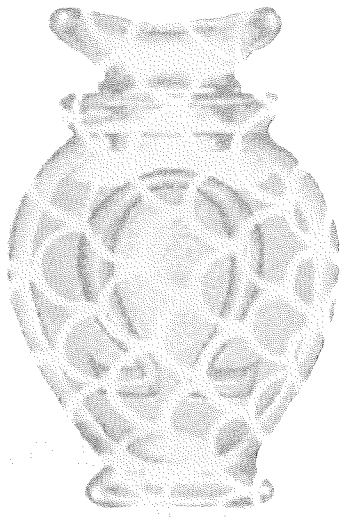
The oil composition of cultured seafood

The contribution of aquaculture to total seafood production rose from 10% to 30% between 1986 and 2000 and is expected to exceed the wild catch in the next decade.

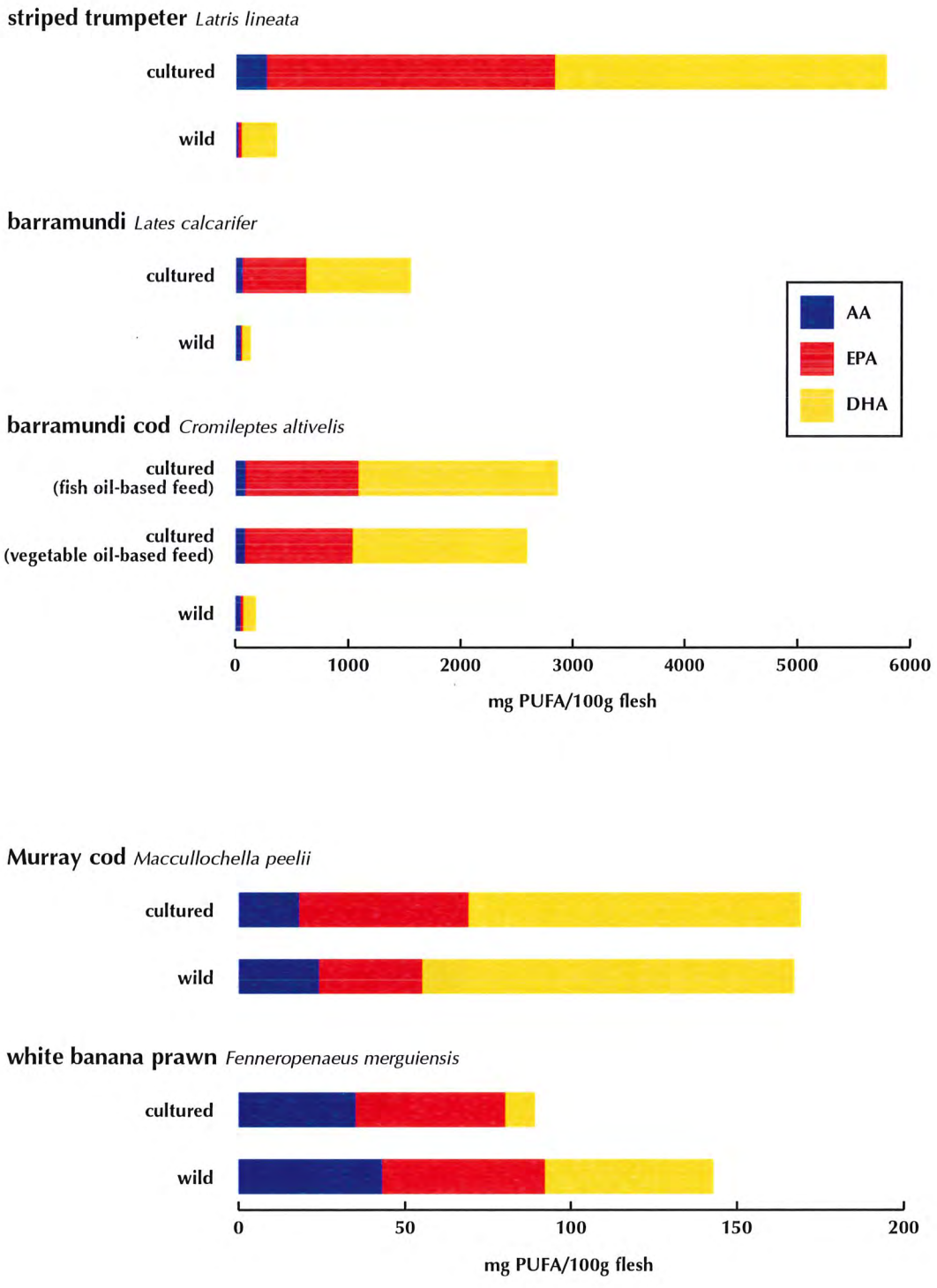
This Chapter reports on the oil content and composition of several cultured (farmed) Australian products, and compares them to their wild-caught counterparts.

In general, cultured finfish grown on contemporary feeds had a higher oil and omega-3 PUFA content than wild-caught products. In contrast, cultured banana prawns contained lower levels of omega-3 PUFA, in particular DHA, relative to wild specimens.

Oil content and composition in aquafeeds can be tailored to influence PUFA profiles in the cultured product. Considerable potential therefore exists to enhance the nutritional quality of cultured seafood.



The effects of culture on major PUFA: cultured versus wild



The effects of culture on total oil content and relative percentages of oils: cultured versus wild

species	sample	total oil content (% of wet mass)	percentage of oils SAT %	MUFA %	PUFA %
striped trumpeter *Latris lineata*	cultured	31.1	26.8	42.4	30.8
	wild	0.9	24.5	20.2	54.8
barramundi *Lates calcarifer*	cultured	10.0	31.1	37.0	30.3
	wild	0.4	39.3	17.7	43.0
barramundi cod *Cromileptes altivelis*	cultured (fish oil)	22.2	26.9	44.1	29.0
	cultured (vegetable oil)	18.8	28.3	36.5	35.1
	wild	1.0	37.7	21.7	40.7
Murray cod *Maccullochella peelii*	cultured	0.8	36.3	19.2	43.8
	wild	0.7	29.0	25.8	45.3
white banana prawn *Fenneropenaeus merguiensis*	cultured	1.4	35.6	35.4	29.0
	wild	0.9	36.6	23.8	39.6

▲ The effects of culture on total oil content and relative percentages of oils: cultured versus wild

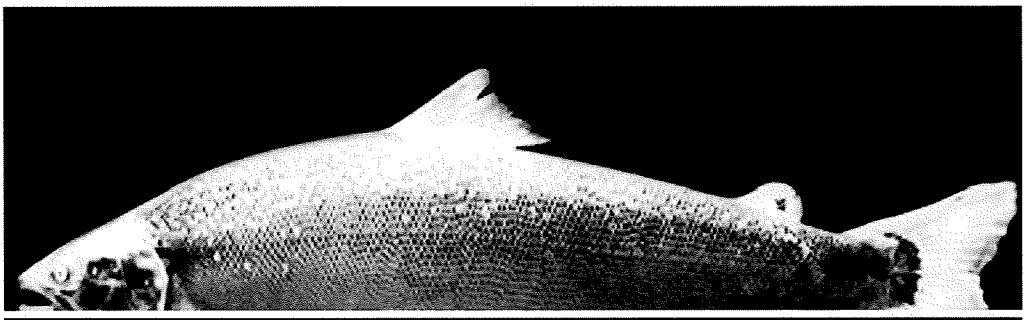
Cultured striped trumpeter, barramundi and barramundi cod had much higher total oils than wild specimens. These cultured fish also had higher relative proportions of MUFA and lower PUFA, unlike cultured Murray cod, which contained higher relative proportions of SAT and lower MUFA than wild specimens. Cultured banana prawns had more total oil, and higher relative proportions of MUFA and lower PUFA than wild specimens. Oils used in aquafeeds may influence the oil profile of the cultured product. For example, barramundi cod raised on fish oil had higher relative proportions of MUFA and lower PUFA than those fed on vegetable oil.

Note: The study also found that cultured and wild prawns had similar cholesterol contents (higher than other seafoods).

◀ The effects of culture on major PUFA: cultured versus wild

Striped trumpeter, barramundi and barramundi cod raised on manufactured feeds had a much higher omega-3 PUFA content than their wild counterparts. Striped trumpeter had the highest omega-3 PUFA content reported. The wild specimens had a higher DHA to EPA ratio than the cultured fish, possibly reflecting the Northern Hemisphere origin of oil in the feed. Cultured and wild Murray cod differed little in PUFA content. Cultured banana prawns contained less omega-3 PUFA than wild specimens, in particular DHA.

Chapter 3



The effects of processing and environment on the oil composition of seafood

The effects of processing and environment on the oil composition of seafood

Considerable information exists on the oil content and composition of Australian seafood. Factors that may affect these oil profiles, however, have not been widely studied. This Chapter presents some examples of how oil profiles varied in relation to cooking, value-adding, sampling technique and environmental conditions.

Cooking

The cooking methods investigated were pan frying, deep frying, grilling, steaming and microwaving. None of the methods affected omega-3 PUFA content. Three commercial packaged soups containing seafood by-products were also examined. They contained beneficial omega-3 PUFA, but at lower levels than in fresh and cooked fillets.

Value-adding

Value-added products developed from cultured (farmed) Atlantic salmon were examined. Oil content and composition was not affected by cold smoking, hot smoking, ishanabe (brine solution curing), or the salting and storing of roe. By-products from filleting – mince, skin, head, frame, viscera and trim – emerged as excellent sources of omega-3 PUFA.

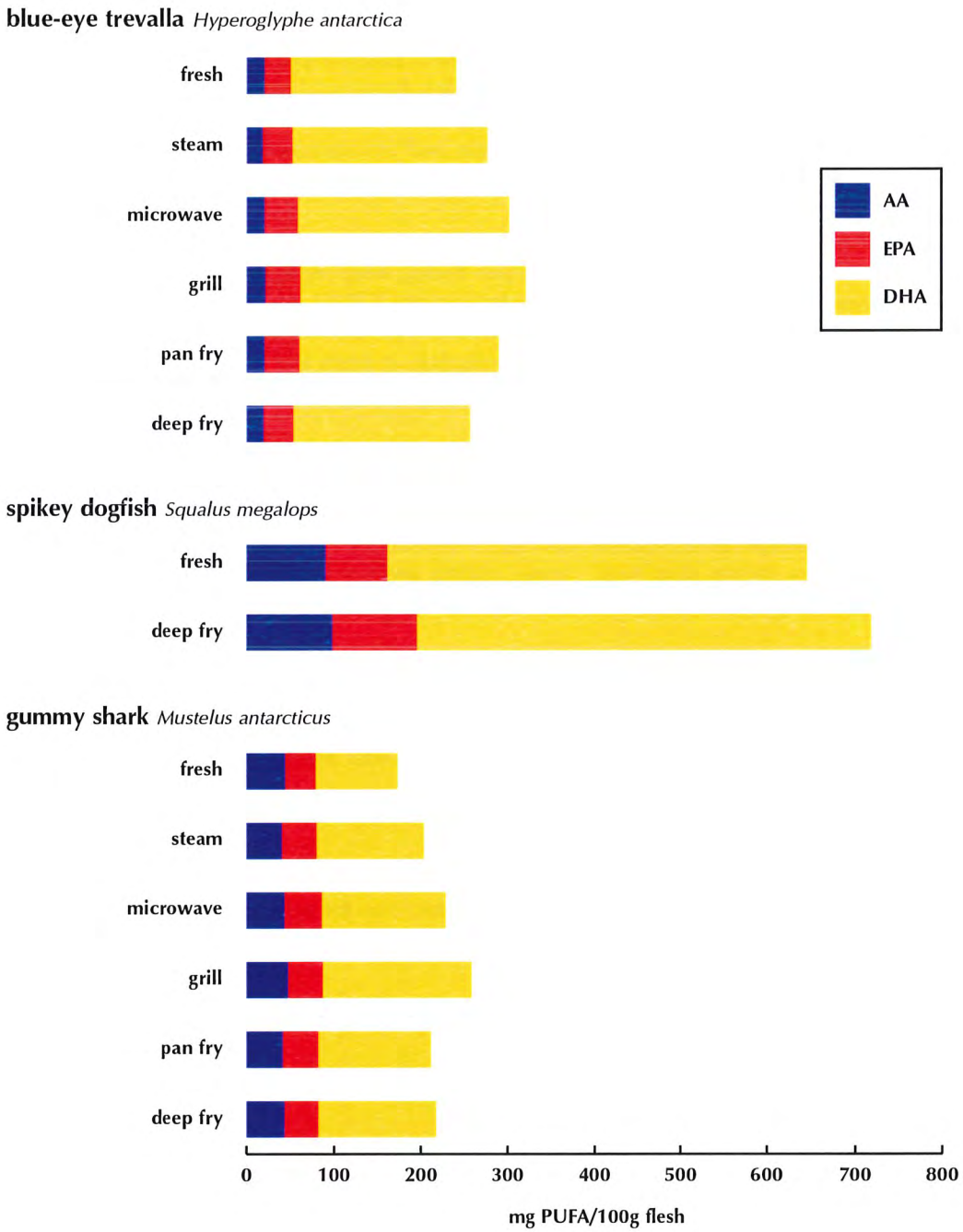
Sampling technique

In Atlantic salmon, oil content and composition was found to vary along the fillet. This indicates that the standardised use of right shoulder samples may under-represent the oil content of a whole fillet in some species.

Environmental conditions

Some variation was observed with season and location for selected finfish and shellfish, but the differences had little effect on oil quality.

The effects of cooking on major PUFA



The effects of cooking on total and relative percentage of oils

species	cooking method	total oil content (% of wet mass)	percentage of oils SAT %	MUFA %	PUFA %
blue-eye trevalla *Hyperoglyphe antarctica*	fresh	1.4	27.9	31.1	41.0
	steam	1.1	26.5	21.7	51.8
	microwave	1.5	26.3	22.6	51.2
	grill	1.9	17.5	44.9	37.5
	pan fry	2.3	15.8	51.3	32.8
	deep fry	5.3	26.5	22.0	51.6
spikey dogfish *Squalus megalops*	fresh	3.5	21.8	33.6	40.0
	deep fry	7.1	23.5	29.8	43.6
gummy shark *Mustelus antarcticus*	fresh	0.9	31.4	18.1	50.5
	steam	0.9	29.3	19.7	51.0
	microwave	1.0	27.7	20.9	51.4
	grill	1.3	22.2	33.8	44.0
	pan fry	3.8	13.1	58.0	28.9
	deep fry	3.8	27.1	21.6	51.4

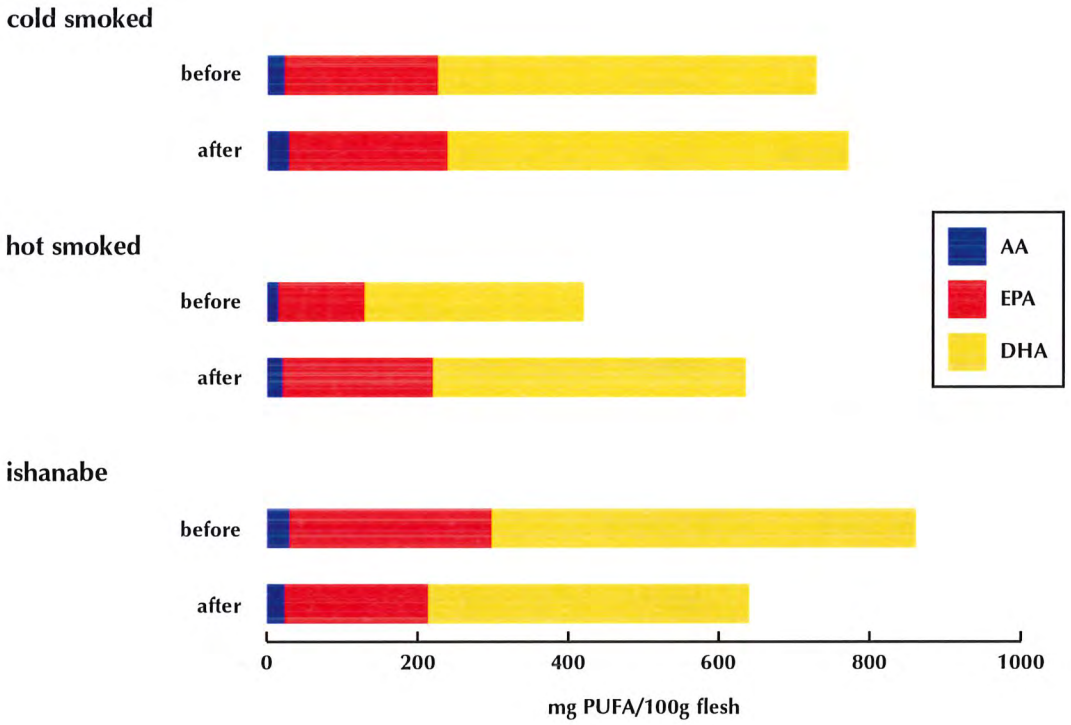
▲ The effects of cooking on total and relative percentage of oils

The uptake of oils by fish fillets will vary according to cooking procedure, the type and quantity of cooking oil, and possibly the quality of the fillet. For all species examined, deep frying showed the highest oil content, followed by pan frying. The SAT/MUFA/PUFA profile of the cooked fillet will also reflect the oil profile of the cooking oil. In this study, pan frying and grilling in cottonseed oil increased MUFA, and deep frying in peanut oil increased omega-6 PUFA in the cooked fillet.

◀ The effects of cooking on omega-3 PUFA content

In the fillets examined, the content of nutritionally-important omega-3 PUFA (EPA and DHA) was not adversely affected by any form of cooking investigated.

Atlantic salmon (*Salmo salar*): variation in major PUFA with curing



Atlantic salmon (*Salmo salar*): variation in total oil content and relative percentages of oils with curing

curing method	sample	total oil content (% of wet mass)	percentage of oils SAT %	MUFA %	PUFA %
cold smoked	before	2.5	28.2	22.6	49.2
	after	2.3	27.4	20.0	52.6
hot smoked	before	1.7	30.2	21.8	48.1
	after	3.0	27.8	28.9	43.2
ishanabe	before	3.1	27.6	25.8	46.6
	after	2.0	27.6	22.8	49.6

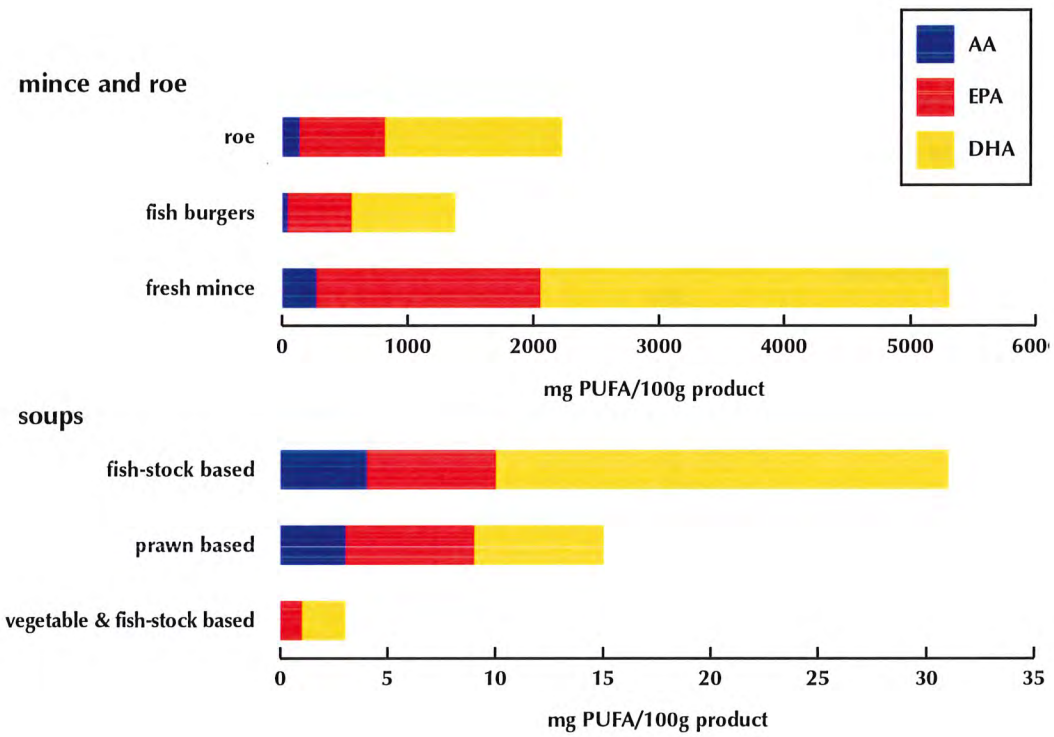
▲ **Atlantic salmon (*Salmo salar*): variation in total oil content and relative percentages of oils with curing**

The curing process caused little variation in the relative proportions of fats. The small variation that was observed may be due to between sample differences, or changes in water content.

◀ **Atlantic salmon (*Salmo salar*): variation in major PUFA with curing**

None of these treatments adversely affect omega-3 PUFA content in Atlantic salmon. The slight decrease in omega-3 PUFA content in the ishanabe treatment (soaking in brine solution), was largely due to the uptake of water. The slight increase in omega-3 PUFA content after hot and cold smoking was probably due to water loss during processing. For all samples, DHA was two to threefold greater than EPA. These are mean trends; some variation was observed between individuals.

Atlantic salmon (*Salmo salar*): variation in major PUFA in commercial products



Atlantic salmon (*Salmo salar*): variation in total oil content and relative proportion of oils in commercial products

product	sample	total oil content (% of wet mass)	percentage of oils SAT %	MUFA %	PUFA %
mince and roe	roe	10.6	19.5	33.8	54.6
	fish burgers	9.8	16.8	47.4	37.6
	fresh mince	25.3	21.1	35.5	48.6
soups	fish-stock based	1.1	53.4	36.0	10.6
	prawn based	2.3	67.7	26.8	5.5
	veg & fish-stock based	0.1	28.9	43.2	27.9

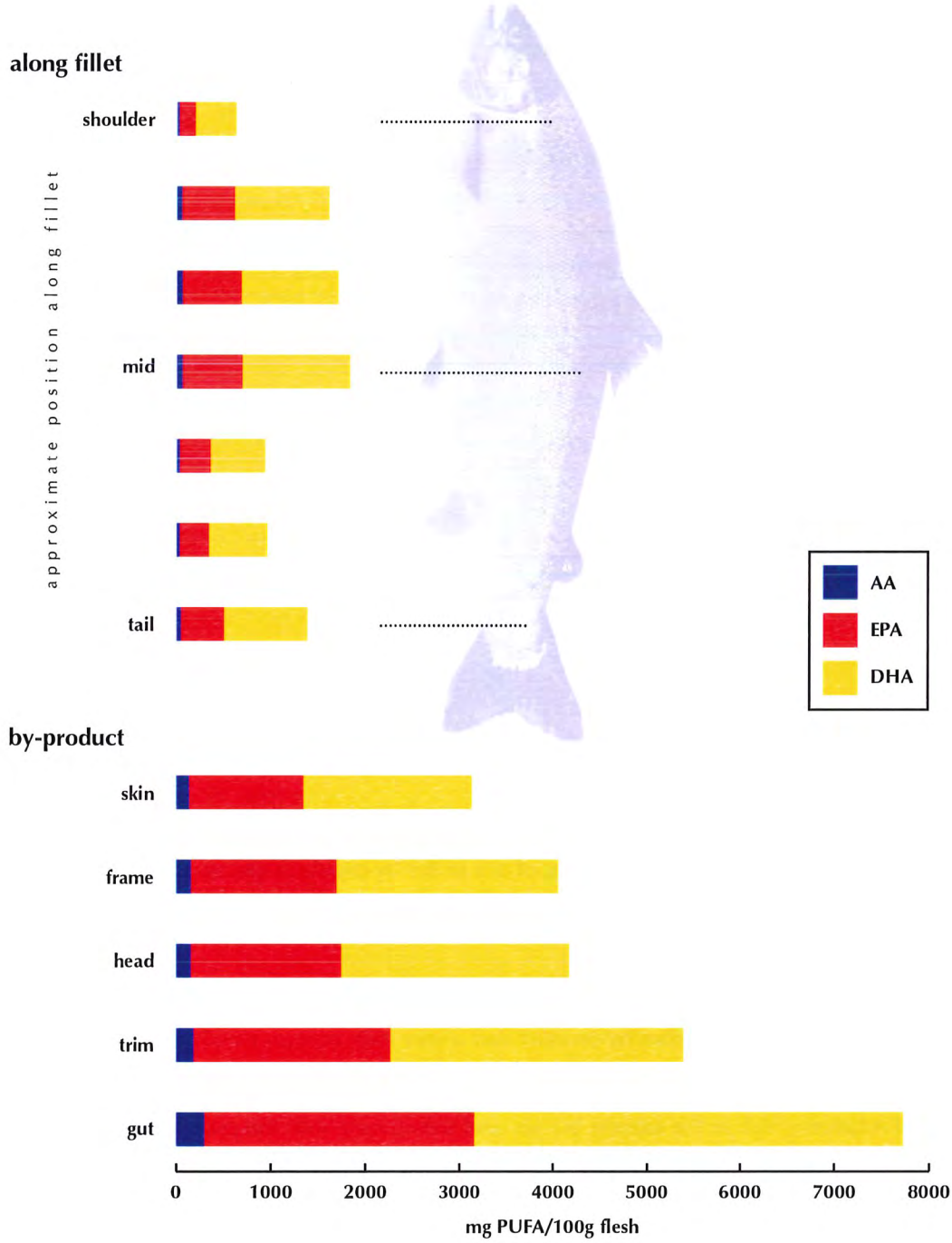
▲ **Atlantic salmon (*Salmo salar*): variation in total oil content and relative proportion of oils in commercial products**

Salmon mince, a commercial burger product made from salmon mince, and roe, had a high total oil content. Packaged soups containing seafood by-product had low total oil contents. The relative proportions of oils in the by-products and soups varied, largely due to the presence of other ingredients.

◀ **Atlantic salmon (*Salmo salar*): variation in major PUFA in commercial products**

Salmon mince derived from by-product had a very high omega-3 PUFA content, and therefore has potential as a nutritional value-added product. As in the fresh fillet, DHA was greater than EPA in the salmon mince. The amount of omega-3 PUFA was still relatively high in the salmon burger, and would vary with the proportion of salmon mince included. Roe also contained high omega-3 PUFA, and greater DHA than EPA. Packaged soups produced using seafood by-product contained low amounts of omega-3 PUFA, and varied according to the source of stock.

Atlantic salmon (*Salmo salar*): variation in major PUFA in the fillet and by-product



Atlantic salmon (*Salmo salar*): variation in total oil content and relative percentages of oils in the fillet and by-product

Atlantic salmon	sample	total oil content (% of wet mass)	mean percentage of oils SAT %	MUFA %	PUFA %
along fillet *shoulder to tail*	shoulder	2.2	30.1	27.1	42.8
		6.5			
		7.6			
	mid	7.6			
		5.9			
		4.1			
	tail	5.5			
by-product	skin	14.2	26.8	30.6	42.7
	frame	17.6			
	head	18.9			
	trim	23.4			
	gut	36.2			

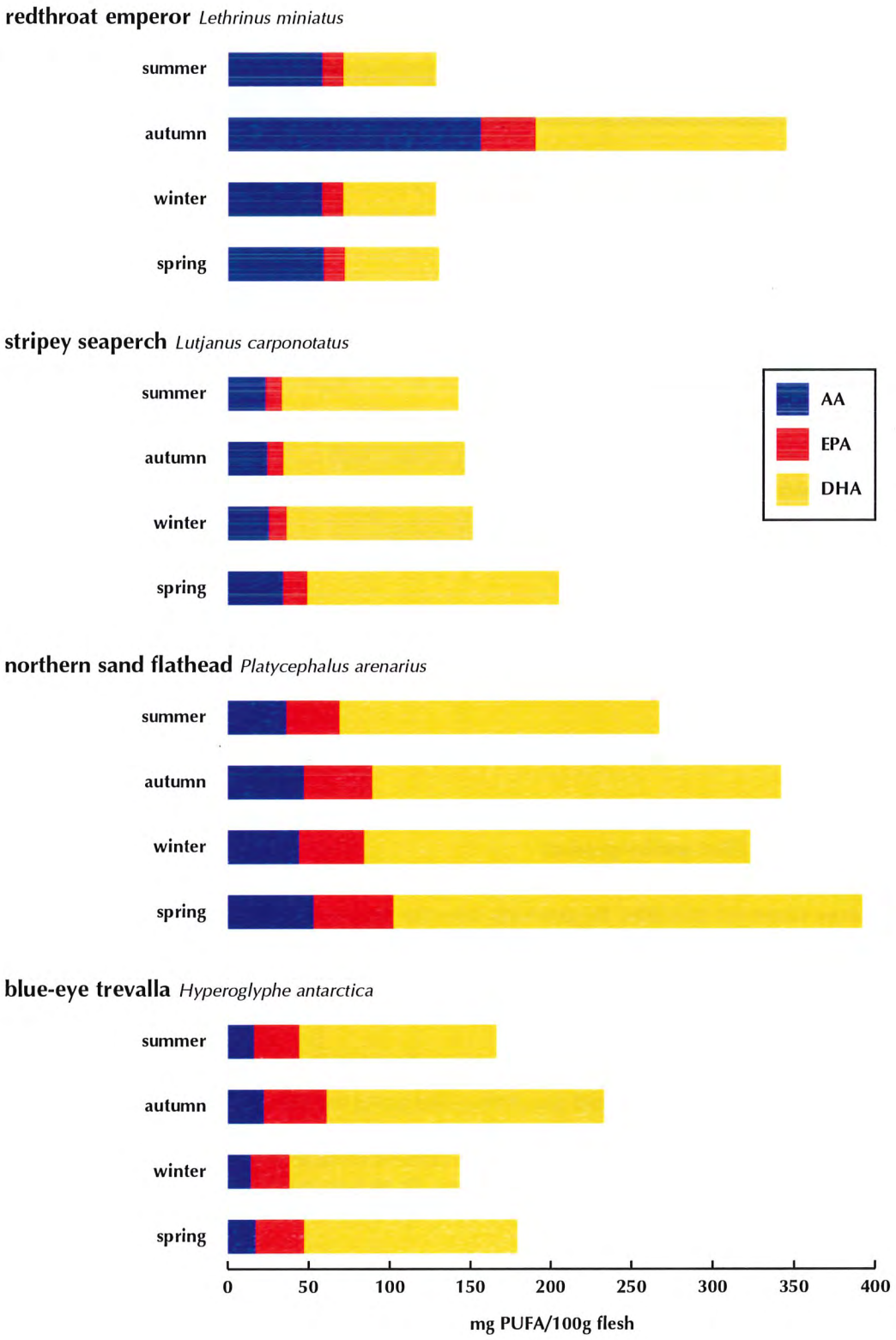
▲ **Atlantic salmon (*Salmo salar*): variation in total oil content and relative percentages of oils in the fillet and by-product**

Oil content was in the moderate to high range in all fillet samples, with the highest values observed mid-fillet. By-products from the processing of Atlantic salmon had very high total oil contents compared with the fillet. Little variation occurred in the relative proportions of oils, either between by-products, or along the fillet.

◀ **Atlantic salmon (*Salmo salar*): variation in major PUFA in the fillet and by-product**

Omega-3 PUFA content varied about threefold along the fillet of Atlantic salmon, with the highest values observed mid-fillet. By-product from Atlantic salmon processing had a very high omega-3 PUFA content compared with the fillet, and have considerable potential for value-adding. DHA was greater than EPA in all fillet and by-product samples.

Seasonal variation in major PUFA



Seasonal variation in total oil content and relative proportion of oils

species	season	total oil content (% of wet mass)	percentage of oils SAT %	MUFA %	PUFA %
redthroat emperor *Lethrinus miniatus*	summer	0.5	37.8	15.4	46.8
	autumn	1.8	36.8	24.7	38.5
	winter	0.4	30.4	14.4	55.2
	spring	0.5	36.3	13.2	50.5
stripey seaperch *Lutjanus carponotatus*	summer	0.4	37.1	18.1	44.8
	autumn	0.4	34.2	15.0	50.8
	winter	0.4	32.7	15.3	52.0
	spring	0.5	40.2	20.7	39.2
northern sand flathead *Platycephalus arenarius*	summer	0.5	49.0	12.7	38.3
	autumn	0.6	31.7	16.8	51.4
	winter	0.6	28.8	12.2	59.0
	spring	0.9	28.9	13.2	58.0
blue-eye trevalla *Hyperoglyphe antarctica*	summer	1.0	30.5	20.6	47.6
	autumn	1.0	31.9	23.9	44.2
	winter	0.6	28.9	14.8	56.3
	spring	0.8	37.9	23.3	38.8

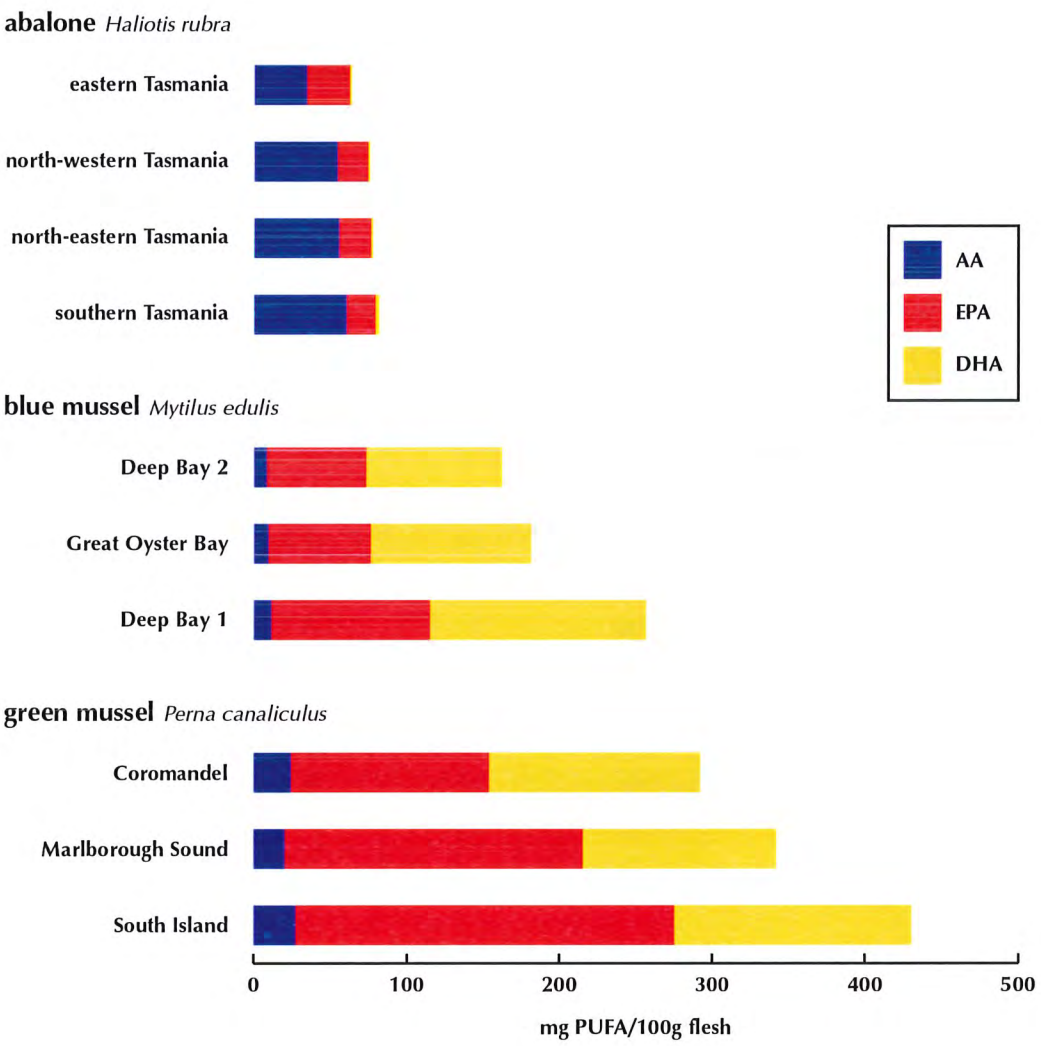
▲ Seasonal variation in total oil content and relative proportion of oils

Redthroat emperor had a moderate oil content in autumn, and a low oil content for the rest of the year. The other three species had low total oil content in all seasons. All four species recorded only slight seasonal differences in the relative proportions of oils.

◀ Seasonal variation in major PUFA

Redthroat emperor and blue-eye trevalla had a greater omega-3 PUFA content in autumn. Stripey seaperch and northern sand flathead had a greater omega-3 PUFA content in spring. All species showed a high DHA to EPA ratio. High levels of AA were observed in redthroat emperor and northern sand flathead, probably due to dietary preferences.

Regional variation in major PUFA



Regional variation in total oil content and relative proportion of oils

species	region	total oil content (% of wet mass)	percentage of oils SAT %	MUFA %	PUFA %
abalone *Haliotis rubra*	eastern Tas.	0.7	34.3	22.3	43.4
	north-western Tas.	0.9	30.7	25.0	44.4
	north-eastern Tas.	0.8	31.6	24.0	44.4
	southern Tas.	0.8	32.1	23.4	44.5
blue mussel *Mytilus edulis*	Deep Bay 2	1.0	29.4	10.3	49.3
	Great Oyster Bay	1.2	30.4	9.6	50.1
	Deep Bay 1	1.6	28.9	11.9	44.0
green mussel *Perna canaliculus*	Coromandel	1.5	27.6	18.4	43.7
	Marlborough Sound	1.9	28.6	18.2	44.4
	South Island	2.6	27.8	18.1	44.6

▲ Regional variation in total oil content and relative proportion of oils

Abalone had a low total oil content, with blue and green mussels low to moderate. Oil content was similar for abalone collected at four Tasmanian locations. Variation in oil content occurred for both mussels. Blue mussel collected around Tasmania contained slightly lower total oil than the green mussel from New Zealand. Variation in oil content was greater for the green mussel. The relative proportions of oils differed only slightly by region.

◀ Regional variation in major PUFA

The PUFA content was generally similar between sites for abalone, with AA levels highest. Abalone from one site showed lower AA and higher EPA. The omega-3 PUFA content of both blue and green mussels varied between sites. Blue mussel collected around Tasmania contained a higher DHA to EPA ratio than the green mussel from New Zealand.

Chapter 4

The oil composition of further seafood species

The oil composition of further seafood species

This Chapter provides oil compositional data for 79 seafood species and complements the data on 189 species in *Seafood the Good Food.*

A summary of the average content of omega-3 PUFA in various food groups is shown below. Results from the two volumes of *Seafood the Good Food* indicate that seafood contains considerably more beneficial omega-3 oils than other food groups.

Average omega-3 PUFA in Australian seafood and other food groups

food group	omega-3 PUFA (mg/100 g wet mass)
fish	235
oysters	150
prawns	130
lobster	105
turkey	35
beef	22
chicken	19
lamb	18
pork	0
veal	0

Data for non-seafood items from references cited in Nichols *et al* (1998).

The major oil classes in most seafood are polar oil or triglyceride. In this study, however, several species contained mainly wax ester or diacylglyceryl ether or hydrocarbon. Further research on the oil profiles of these groups is needed, including a comparison of geographic and seasonal variation between and within species.

How to use the information sheets in Chapter 4

Marketing name
Species are presented by their approved marketing name.

Code for Australian Aquatic Biota (CAAB) used in fisheries data analysis (www.marine.csiro.au/caab).

Photograph of commercial-size specimen.

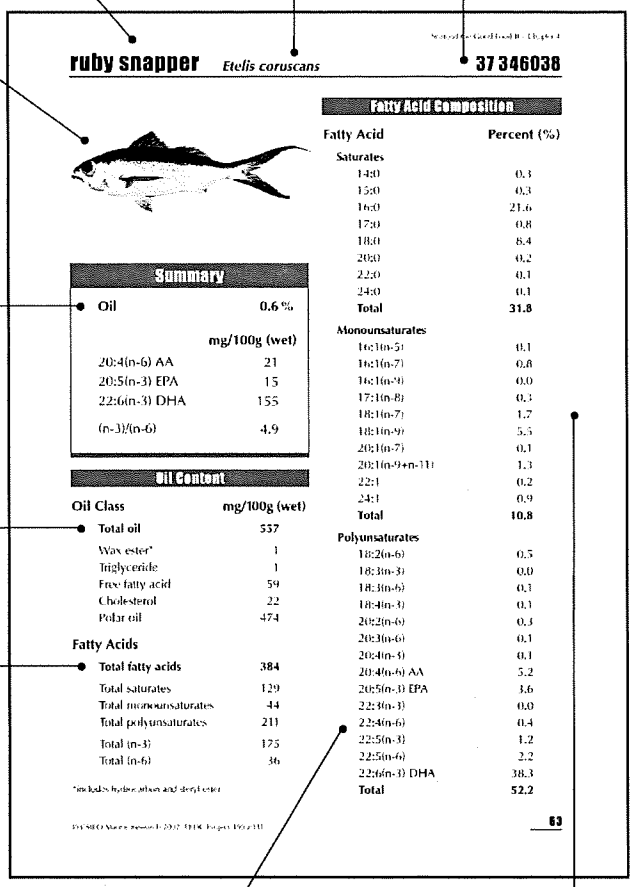
Scientific name

Summary
- oil content in percentage (%) of wet mass
- content of arachidonic acid, eicosapentaenoic acid and docosahexaenoic acid (mg/100 g wet mass)
- ratio of (n-3)/(n-6) PUFA

Data are for flesh without skin and are the average of three specimens.

Oil content (mg/100 g wet mass) of the classes of oil.

Fatty acid content (mg/100 g) of:
- total saturated fatty acids (no double bonds)
- total monounsaturated fatty acids (one double bond)
- total PUFA (two or more double bonds)
- total (n-3) and (n-6) PUFA



ruby snapper *Etelis coruscans* **37 346038**

Summary

Oil	0.6 %
	mg/100g (wet)
20:4(n-6) AA	21
20:5(n-3) EPA	15
22:6(n-3) DHA	155
(n-3)/(n-6)	4.9

Oil Content

Oil Class	mg/100g (wet)
Total oil	537
Wax ester*	1
Triglyceride	1
Free fatty acid	59
Cholesterol	22
Polar oil	474
Fatty Acids	
Total fatty acids	384
Total saturates	129
Total monounsaturates	44
Total polyunsaturates	211
Total (n-3)	175
Total (n-6)	36

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.1
15:0	0.3
16:0	21.6
17:0	0.8
18:0	8.4
20:0	0.2
22:0	0.1
24:0	0.1
Total	**31.8**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	0.8
16:1(n-9)	0.0
17:1(n-8)	0.1
18:1(n-7)	1.7
18:1(n-9)	5.5
20:1(n-7)	0.1
20:1(n-9+n-11)	1.3
22:1	0.2
24:1	0.9
Total	**10.8**
Polyunsaturates	
18:2(n-6)	0.5
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.1
20:2(n-6)	0.1
20:3(n-6)	0.1
20:4(n-3)	0.1
20:4(n-6) AA	5.2
20:5(n-3) EPA	3.6
22:3(n-3)	0.0
22:4(n-6)	0.4
22:5(n-3)	1.2
22:5(n-6)	2.2
22:6(n-3) DHA	38.3
Total	**52.2**

63

Fatty acid nomenclature
Fatty acids are designated X:Y(n-Z), where X indicates number of carbon atoms, Y indicates number of double bonds and Z indicates number of carbon atoms from the terminal methyl (n) end of the molecule to the first double bond. (n-3) is equivalent to omega-3 (also ω3) for PUFA.

Proportion of each fatty acid as a percentage (%) of total fatty acids. Total % for saturated, monounsaturated and PUFA are shown and may include minor % of fatty acids not listed.

nd = not determined

spikey dogfish *Squalus megalops* 37 020006

Summary

Oil	0.7 %
	mg/100g (wet)
20:4(n-6) AA	19
20:5(n-3) EPA	7
22:6(n-3) DHA	165
(n-3)/(n-6)	6.6

Oil Content

Oil Class	mg/100g (wet)
Total oil	**735**
Wax ester*	0
Triglyceride	1
Free fatty acid	9
Cholesterol	15
Polar oil	710
Fatty Acids	
Total fatty acids	**402**
Total saturates	120
Total monounsaturates	71
Total polyunsaturates	211
Total (n-3)	183
Total (n-6)	28

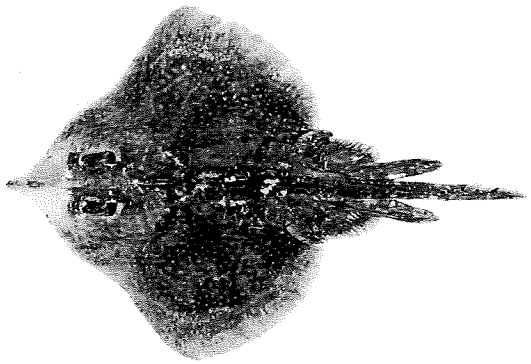
*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.1
15:0	0.1
16:0	20.1
17:0	0.8
18:0	8.3
20:0	0.0
22:0	0.0
24:0	0.0
Total	**29.8**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	0.7
16:1(n-9)	0.1
17:1(n-8)	0.4
18:1(n-7)	3.1
18:1(n-9)	11.7
20:1(n-7)	0.0
20:1(n-9+n-11)	1.0
22:1	0.3
24:1	0.3
Total	**17.8**
Polyunsaturates	
18:2(n-6)	0.3
18:3(n-3)	0.0
18:3(n-6)	0.0
18:4(n-3)	0.5
20:2(n-6)	0.2
20:3(n-6)	0.1
20:4(n-3)	0.2
20:4(n-6) AA	4.8
20:5(n-3) EPA	1.7
22:3(n-3)	0.1
22:4(n-6)	0.7
22:5(n-3)	2.1
22:5(n-6)	0.8
22:6(n-3) DHA	41.0
Total	**52.4**

skate *Raja* sp.

37 031005



Summary

Oil	0.7 %
	mg/100g (wet)
20:4(n-6) AA	30
20:5(n-3) EPA	19
22:6(n-3) DHA	103
(n-3)/(n-6)	3.0

Oil Content

Oil Class	mg/100g (wet)
Total oil	**723**
Wax ester*	0
Triglyceride	2
Free fatty acid	1
Cholesterol	47
Polar oil	674

Fatty Acids

Total fatty acids	**386**
Total saturates	124
Total monounsaturates	78
Total polyunsaturates	184
Total (n-3)	138
Total (n-6)	46

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.4
15:0	0.2
16:0	21.2
17:0	0.9
18:0	8.7
20:0	0.1
22:0	0.2
24:0	0.1
Total	**32.2**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	1.2
16:1(n-9)	0.3
17:1(n-8)	1.1
18:1(n-7)	3.1
18:1(n-9)	11.2
20:1(n-7)	0.2
20:1(n-9+n-11)	0.8
22:1	0.8
24:1	1.3
Total	**20.2**
Polyunsaturates	
18:2(n-6)	0.9
18:3(n-3)	0.0
18:3(n-6)	0.3
18:4(n-3)	0.3
20:2(n-6)	0.3
20:3(n-6)	0.1
20:4(n-3)	0.2
20:4(n-6) AA	7.8
20:5(n-3) EPA	4.8
22:3(n-3)	0.1
22:4(n-6)	1.6
22:5(n-3)	3.8
22:5(n-6)	1.0
22:6(n-3) DHA	26.5
Total	**47.6**

elephant fish *Callorhinchus milii* 37 043001

Summary

Oil	1.1 %
	mg/100g (wet)
20:4(n-6) AA	35
20:5(n-3) EPA	52
22:6(n-3) DHA	155
(n-3)/(n-6)	3.8

Oil Content

Oil Class	mg/100g (wet)
Total oil	**1101**
Wax ester*	0
Triglyceride	3
Free fatty acid	9
Cholesterol	18
Polar oil	1071
Fatty Acids	
Total fatty acids	**613**
Total saturates	189
Total monounsaturates	113
Total polyunsaturates	311
Total (n-3)	246
Total (n-6)	65

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.4
15:0	0.6
16:0	20.4
17:0	1.4
18:0	7.0
20:0	0.1
22:0	0.1
24:0	0.0
Total	**31.0**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	2.2
16:1(n-9)	0.3
17:1(n-8)	0.8
18:1(n-7)	4.6
18:1(n-9)	8.5
20:1(n-7)	0.4
20:1(n-9+n-11)	0.7
22:1	0.3
24:1	0.1
Total	**18.4**
Polyunsaturates	
18:2(n-6)	0.7
18:3(n-3)	0.0
18:3(n-6)	0.0
18:4(n-3)	0.6
20:2(n-6)	1.3
20:3(n-6)	0.5
20:4(n-3)	0.7
20:4(n-6) AA	5.7
20:5(n-3) EPA	8.4
22:3(n-3)	0.3
22:4(n-6)	1.3
22:5(n-3)	4.8
22:5(n-6)	1.1
22:6(n-3) DHA	25.3
Total	**50.6**

longfin eel *Anguilla reinhardtii* 37 056002

Summary

Oil	**1.3 %**
	mg/100g (wet)
20:4(n-6) AA	62
20:5(n-3) EPA	22
22:6(n-3) DHA	106
(n-3)/(n-6)	1.2

Oil Content

Oil Class	mg/100g (wet)
Total oil	**1342**
Wax ester*	39
Triglyceride	644
Free fatty acid	9
Cholesterol	33
Polar oil	617

Fatty Acids

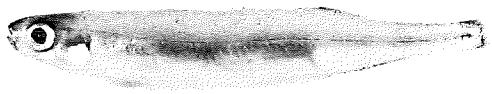
Total fatty acids	**918**
Total saturates	285
Total monounsaturates	321
Total polyunsaturates	312
Total (n-3)	169
Total (n-6)	142

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.9
15:0	1.3
16:0	17.7
17:0	1.7
18:0	6.5
20:0	0.1
22:0	0.1
24:0	0.1
Total	**30.9**
Monounsaturates	
16:1(n-5)	0.4
16:1(n-7)	4.7
16:1(n-9)	0.8
17:1(n-8)	1.6
18:1(n-7)	4.6
18:1(n-9)	19.5
20:1(n-7)	0.1
20:1(n-9+n-11)	1.8
22:1	0.9
24:1	0.6
Total	**35.0**
Polyunsaturates	
18:2(n-6)	4.6
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.3
20:2(n-6)	0.6
20:3(n-6)	0.7
20:4(n-3)	1.0
20:4(n-6) AA	6.6
20:5(n-3) EPA	2.3
22:3(n-3)	0.0
22:4(n-6)	1.2
22:5(n-3)	3.3
22:5(n-6)	1.4
22:6(n-3) DHA	11.8
Total	**34.1**

whitebait *Galaxias maculatus* 37 102006



Summary

Oil	3.3 %
	mg/100g (wet)
20:4(n-6) AA	70
20:5(n-3) EPA	186
22:6(n-3) DHA	409
(n-3)/(n-6)	3.1

Oil Content

Oil Class	mg/100g (wet)
Total oil	**3304**
Wax ester*	97
Triglyceride	797
Free fatty acid	661
Cholesterol	226
Polar oil	1522
Fatty Acids	
Total fatty acids	**2199**
Total saturates	685
Total monounsaturates	602
Total polyunsaturates	912
Total (n-3)	687
Total (n-6)	219

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	4.2
15:0	0.6
16:0	18.8
17:0	0.8
18:0	5.2
20:0	0.2
22:0	0.1
24:0	0.1
Total	**31.3**
Monounsaturates	
16:1(n-5)	0.5
16:1(n-7)	5.9
16:1(n-9)	1.0
17:1(n-8)	0.8
18:1(n-7)	3.9
18:1(n-9)	12.8
20:1(n-7)	0.2
20:1(n-9+n-11)	0.5
22:1	0.4
24:1	0.6
Total	**27.2**
Polyunsaturates	
18:2(n-6)	4.9
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.7
20:2(n-6)	0.4
20:3(n-6)	0.6
20:4(n-3)	1.1
20:4(n-6) AA	3.2
20:5(n-3) EPA	8.4
22:3(n-3)	0.0
22:4(n-6)	0.2
22:5(n-3)	2.4
22:5(n-6)	0.5
22:6(n-3) DHA	18.7
Total	**41.4**

whitebait *Lovettia sealii*

37 103002

Summary

Oil	2.6 %
	mg/100g (wet)
20:4(n-6) AA	32
20:5(n-3) EPA	221
22:6(n-3) DHA	405
(n-3)/(n-6)	10.6

Oil Content

Oil Class	mg/100g (wet)
Total oil	**2584**
Wax ester*	67
Triglyceride	447
Free fatty acid	370
Cholesterol	179
Polar oil	1520

Fatty Acids

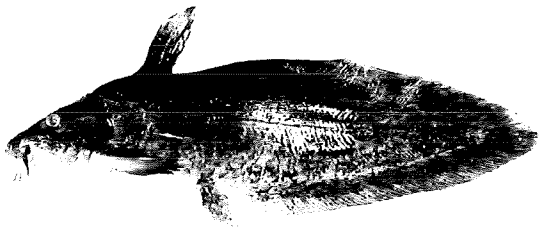
Total fatty acids	**1630**
Total saturates	497
Total monounsaturates	327
Total polyunsaturates	806
Total (n-3)	734
Total (n-6)	70

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.0
15:0	0.7
16:0	20.8
17:0	0.7
18:0	5.5
20:0	0.1
22:0	0.1
24:0	0.2
Total	**30.5**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	3.3
16:1(n-9)	0.2
17:1(n-8)	0.4
18:1(n-7)	2.0
18:1(n-9)	10.6
20:1(n-7)	0.1
20:1(n-9+n-11)	0.6
22:1	0.6
24:1	1.6
Total	**20.0**
Polyunsaturates	
18:2(n-6)	1.6
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	5.1
20:2(n-6)	0.2
20:3(n-6)	0.0
20:4(n-3)	0.7
20:4(n-6) AA	2.0
20:5(n-3) EPA	13.6
22:3(n-3)	0.0
22:4(n-6)	0.0
22:5(n-3)	0.8
22:5(n-6)	0.3
22:6(n-3) DHA	24.9
Total	**49.5**

freshwater catfish *Tandanus tandanus* 37 192006



Summary

Oil	1.0 %
	mg/100g (wet)
20:4(n-6) AA	42
20:5(n-3) EPA	30
22:6(n-3) DHA	78
(n-3)/(n-6)	1.2

Oil Content

Oil Class	mg/100g (wet)
Total oil	**971**
Wax ester*	0
Triglyceride	297
Free fatty acid	29
Cholesterol	25
Polar oil	620
Fatty Acids	
Total fatty acids	**704**
Total saturates	213
Total monounsaturates	243
Total polyunsaturates	248
Total (n-3)	133
Total (n-6)	115

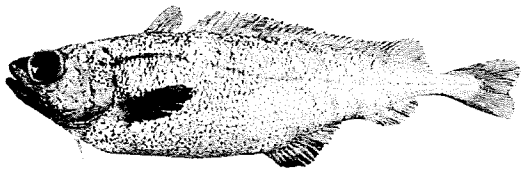
*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.5
15:0	0.4
16:0	18.1
17:0	0.9
18:0	7.9
20:0	0.2
22:0	0.1
24:0	0.1
Total	**30.3**
Monounsaturates	
16:1(n-5)	0.3
16:1(n-7)	4.7
16:1(n-9)	0.5
17:1(n-8)	0.7
18:1(n-7)	3.8
18:1(n-9)	20.2
20:1(n-7)	0.1
20:1(n-9+n-11)	2.2
22:1	0.9
24:1	0.3
Total	**34.0**
Polyunsaturates	
18:2(n-6)	6.1
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.1
20:2(n-6)	0.7
20:3(n-6)	1.2
20:4(n-3)	0.7
20:4(n-6) AA	6.3
20:5(n-3) EPA	4.2
22:3(n-3)	0.0
22:4(n-6)	0.9
22:5(n-3)	2.7
22:5(n-6)	1.4
22:6(n-3) DHA	11.2
Total	**35.7**

ribaldo *Mora moro*

37 224002



Summary

Oil	0.4 %
	mg/100g (wet)
20:4(n-6) AA	7
20:5(n-3) EPA	19
22:6(n-3) DHA	148
(n-3)/(n-6)	12.6

Oil Content

Oil Class	mg/100g (wet)
Total oil	**449**
Wax ester*	0
Triglyceride	0
Free fatty acid	119
Cholesterol	23
Polar oil	307

Fatty Acids

Total fatty acids	**327**
Total saturates	91
Total monounsaturates	45
Total polyunsaturates	192
Total (n-3)	178
Total (n-6)	14

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.4
15:0	0.2
16:0	20.7
17:0	0.3
18:0	5.3
20:0	0.0
22:0	0.0
24:0	0.4
Total	**27.7**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	0.9
16:1(n-9)	0.1
17:1(n-8)	0.2
18:1(n-7)	1.1
18:1(n-9)	6.7
20:1(n-7)	0.0
20:1(n-9+n-11)	2.6
22:1	0.6
24:1	1.3
Total	**13.6**
Polyunsaturates	
18:2(n-6)	0.5
18:3(n-3)	0.0
18:3(n-6)	0.0
18:4(n-3)	0.2
20:2(n-6)	0.1
20:3(n-6)	0.1
20:4(n-3)	0.7
20:4(n-6) AA	2.2
20:5(n-3) EPA	5.9
22:3(n-3)	0.0
22:4(n-6)	0.3
22:5(n-3)	2.2
22:5(n-6)	1.0
22:6(n-3) DHA	45.3
Total	**58.7**

southern rockcod *Pseudophycis barbata* 37 224003

Summary

Oil	0.5 %
	mg/100g (wet)
20:4(n-6) AA	15
20:5(n-3) EPA	30
22:6(n-3) DHA	153
(n-3)/(n-6)	7.5

Oil Content

Oil Class	mg/100g (wet)
Total oil	**509**
Wax ester*	0
Triglyceride	0
Free fatty acid	172
Cholesterol	25
Polar oil	312
Fatty Acids	
Total fatty acids	**378**
Total saturates	108
Total monounsaturates	53
Total polyunsaturates	217
Total (n-3)	192
Total (n-6)	26

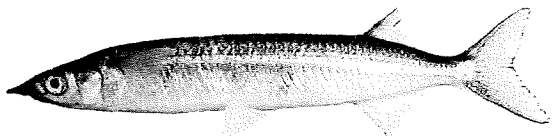
*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.6
15:0	0.3
16:0	19.6
17:0	0.6
18:0	6.4
20:0	0.0
22:0	0.0
24:0	0.7
Total	**28.6**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	1.2
16:1(n-9)	0.2
17:1(n-8)	0.4
18:1(n-7)	2.1
18:1(n-9)	7.7
20:1(n-7)	0.0
20:1(n-9+n-11)	0.7
22:1	0.3
24:1	1.1
Total	**13.9**
Polyunsaturates	
18:2(n-6)	0.8
18:3(n-3)	0.0
18:3(n-6)	0.0
18:4(n-3)	0.2
20:2(n-6)	0.1
20:3(n-6)	0.1
20:4(n-3)	0.4
20:4(n-6) AA	4.0
20:5(n-3) EPA	7.8
22:3(n-3)	0.0
22:4(n-6)	0.6
22:5(n-3)	1.9
22:5(n-6)	1.3
22:6(n-3) DHA	40.4
Total	**57.5**

garfish *Arrhamphus sclerolepis*

37 234006



Summary

Oil	1.0 %
	mg/100g (wet)
20:4(n-6) AA	30
20:5(n-3) EPA	16
22:6(n-3) DHA	106
(n-3)/(n-6)	1.5

Oil Content

Oil Class	mg/100g (wet)
Total oil	**957**
Wax ester*	15
Triglyceride	12
Free fatty acid	46
Cholesterol	45
Polar oil	839

Fatty Acids

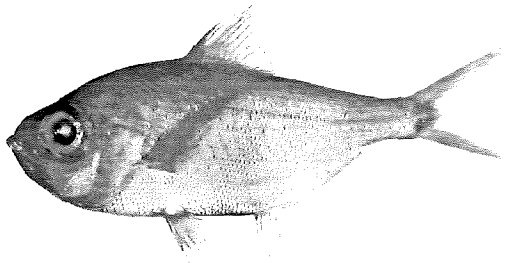
Total fatty acids	**528**
Total saturates	190
Total monounsaturates	103
Total polyunsaturates	234
Total (n-3)	141
Total (n-6)	93

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.2
15:0	0.3
16:0	26.8
17:0	0.8
18:0	7.2
20:0	0.2
22:0	0.2
24:0	0.2
Total	**36.0**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	1.4
16:1(n-9)	0.2
17:1(n-8)	0.2
18:1(n-7)	1.3
18:1(n-9)	14.6
20:1(n-7)	0.0
20:1(n-9+n-11)	1.2
22:1	0.1
24:1	0.3
Total	**19.4**
Polyunsaturates	
18:2(n-6)	8.8
18:3(n-3)	0.0
18:3(n-6)	0.3
18:4(n-3)	0.3
20:2(n-6)	0.2
20:3(n-6)	1.5
20:4(n-3)	0.4
20:4(n-6) AA	5.6
20:5(n-3) EPA	3.0
22:3(n-3)	0.0
22:4(n-6)	0.3
22:5(n-3)	3.0
22:5(n-6)	1.0
22:6(n-3) DHA	20.2
Total	**44.5**

alfonsino *Beryx splendens* 37 258002



Summary

Oil	5.2 %
	mg/100g (wet)
20:4(n-6) AA	34
20:5(n-3) EPA	167
22:6(n-3) DHA	507
(n-3)/(n-6)	7.1

Oil Content

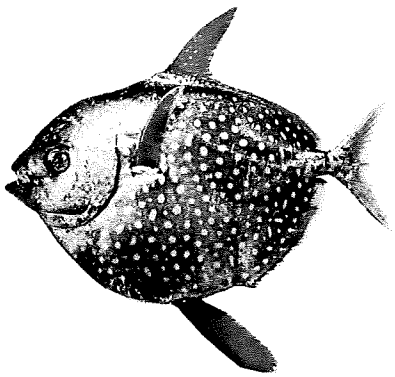
Oil Class	mg/100g (wet)
Total oil	**5211**
Wax ester*	0
Triglyceride	4424
Free fatty acid	0
Cholesterol	20
Polar oil	767
Fatty Acids	
Total fatty acids	**4106**
Total saturates	1189
Total monounsaturates	2010
Total polyunsaturates	907
Total (n-3)	796
Total (n-6)	111

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.6
15:0	0.5
16:0	18.5
17:0	0.7
18:0	5.7
20:0	0.2
22:0	0.1
24:0	0.0
Total	**28.9**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	3.9
16:1(n-9)	0.3
17:1(n-8)	0.9
18:1(n-7)	3.4
18:1(n-9)	28.5
20:1(n-7)	0.3
20:1(n-9+n-11)	8.1
22:1	2.3
24:1	0.8
Total	**49.0**
Polyunsaturates	
18:2(n-6)	1.1
18:3(n-3)	0.0
18:3(n-6)	0.0
18:4(n-3)	0.3
20:2(n-6)	0.3
20:3(n-6)	0.1
20:4(n-3)	1.3
20:4(n-6) AA	0.8
20:5(n-3) EPA	4.1
22:3(n-3)	0.0
22:4(n-6)	0.1
22:5(n-3)	1.4
22:5(n-6)	0.3
22:6(n-3) DHA	12.3
Total	**22.1**

moonfish *Lampris guttatus* 37 268001



Summary

Oil	1.4 %
	mg/100g (wet)
20:4(n-6) AA	18
20:5(n-3) EPA	51
22:6(n-3) DHA	223
(n-3)/(n-6)	7.1

Oil Content

Oil Class	mg/100g (wet)
Total oil	**1352**
Wax ester*	0
Triglyceride	944
Free fatty acid	13
Cholesterol	14
Polar oil	381

Fatty Acids

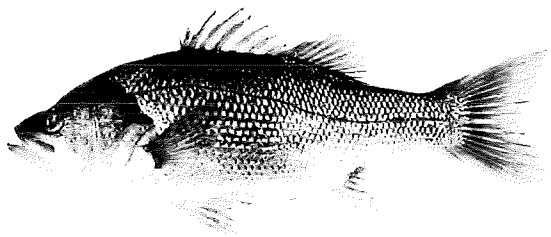
Total fatty acids	**1124**
Total saturates	334
Total monounsaturates	440
Total polyunsaturates	350
Total (n-3)	307
Total (n-6)	43

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.6
15:0	0.5
16:0	20.9
17:0	0.8
18:0	6.9
20:0	0.2
22:0	0.1
24:0	0.1
Total	**31.3**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	3.1
16:1(n-9)	0.3
17:1(n-8)	0.5
18:1(n-7)	2.2
18:1(n-9)	18.1
20:1(n-7)	0.1
20:1(n-9+n-11)	4.3
22:1	1.5
24:1	1.5
Total	**31.9**
Polyunsaturates	
18:2(n-6)	0.9
18:3(n-3)	0.0
18:3(n-6)	0.0
18:4(n-3)	0.3
20:2(n-6)	0.3
20:3(n-6)	0.1
20:4(n-3)	0.8
20:4(n-6) AA	2.4
20:5(n-3) EPA	4.5
22:3(n-3)	0.0
22:4(n-6)	0.3
22:5(n-3)	1.5
22:5(n-6)	0.7
22:6(n-3) DHA	25.0
Total	**36.8**

Australian bass *Macquaria novemaculeata* 37 311034



Summary

Oil	1.5 %
	mg/100g (wet)
20:4(n-6) AA	67
20:5(n-3) EPA	37
22:6(n-3) DHA	157
(n-3)/(n-6)	1.9

Oil Content

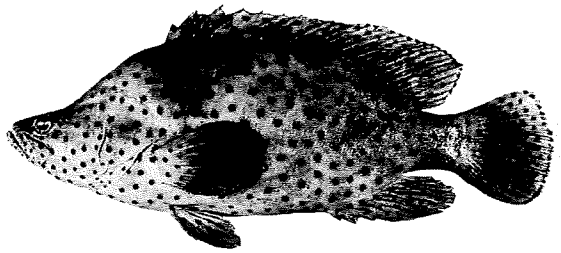
Oil Class	mg/100g (wet)
Total oil	**1462**
Wax ester*	0
Triglyceride	811
Free fatty acid	3
Cholesterol	27
Polar oil	621
Fatty Acids	
Total fatty acids	**1120**
Total saturates	354
Total monounsaturates	366
Total polyunsaturates	400
Total (n-3)	260
Total (n-6)	137

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.8
15:0	0.4
16:0	21.6
17:0	0.5
18:0	4.7
20:0	0.3
22:0	0.1
24:0	0.1
Total	**31.5**
Monounsaturates	
16:1(n-5)	0.3
16:1(n-7)	7.6
16:1(n-9)	0.6
17:1(n-8)	0.8
18:1(n-7)	3.4
18:1(n-9)	17.4
20:1(n-7)	0.2
20:1(n-9+n-11)	1.1
22:1	0.1
24:1	0.5
Total	**32.5**
Polyunsaturates	
18:2(n-6)	2.8
18:3(n-3)	0.0
18:3(n-6)	0.3
18:4(n-3)	1.3
20:2(n-6)	0.4
20:3(n-6)	0.4
20:4(n-3)	0.7
20:4(n-6) AA	6.4
20:5(n-3) EPA	3.3
22:3(n-3)	0.0
22:4(n-6)	1.0
22:5(n-3)	3.6
22:5(n-6)	1.6
22:6(n-3) DHA	14.0
Total	**36.0**

barramundi cod *Cromileptes altivelis* 37 311044



Summary

Oil	1.0 %
	mg/100g (wet)
20:4(n-6) AA	45
20:5(n-3) EPA	22
22:6(n-3) DHA	112
(n-3)/(n-6)	1.9

Oil Content

Oil Class	mg/100g (wet)
Total oil	**994**
Wax ester*	0
Triglyceride	447
Free fatty acid	5
Cholesterol	29
Polar oil	513

Fatty Acids

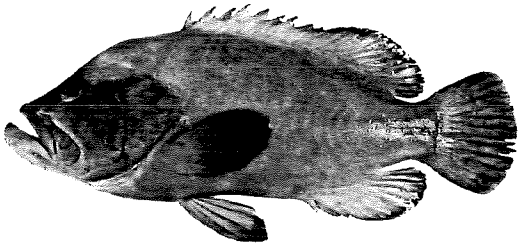
Total fatty acids	**670**
Total saturates	263
Total monounsaturates	154
Total polyunsaturates	253
Total (n-3)	165
Total (n-6)	88

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.9
15:0	0.7
16:0	22.8
17:0	1.1
18:0	9.1
20:0	0.3
22:0	0.2
24:0	0.2
Total	**37.7**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	4.4
16:1(n-9)	0.3
17:1(n-8)	0.5
18:1(n-7)	2.4
18:1(n-9)	11.7
20:1(n-7)	0.2
20:1(n-9+n-11)	1.1
22:1	0.2
24:1	0.8
Total	**21.7**
Polyunsaturates	
18:2(n-6)	1.7
18:3(n-3)	0.0
18:3(n-6)	0.4
18:4(n-3)	0.6
20:2(n-6)	0.3
20:3(n-6)	0.8
20:4(n-3)	0.8
20:4(n-6) AA	8.9
20:5(n-3) EPA	3.4
22:3(n-3)	0.1
22:4(n-6)	1.8
22:5(n-3)	3.4
22:5(n-6)	2.1
22:6(n-3) DHA	16.4
Total	**40.7**

coral cod *Cephalopholis sonnerati* 37 311045



Summary

Oil	0.6 %
	mg/100g (wet)
20:4(n-6) AA	23
20:5(n-3) EPA	11
22:6(n-3) DHA	101
(n-3)/(n-6)	2.6

Oil Content

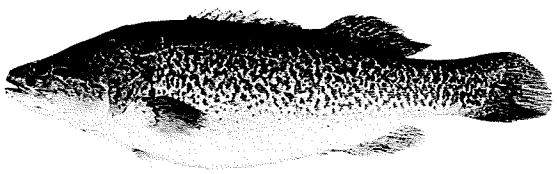
Oil Class	mg/100g (wet)
Total oil	**600**
Wax ester*	0
Triglyceride	53
Free fatty acid	0
Cholesterol	19
Polar oil	528
Fatty Acids	
Total fatty acids	**370**
Total saturates	139
Total monounsaturates	64
Total polyunsaturates	166
Total (n-3)	120
Total (n-6)	46

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.1
15:0	0.4
16:0	23.8
17:0	0.7
18:0	10.6
20:0	0.2
22:0	0.2
24:0	0.2
Total	**37.5**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	2.4
16:1(n-9)	0.1
17:1(n-8)	0.4
18:1(n-7)	1.9
18:1(n-9)	10.4
20:1(n-7)	0.1
20:1(n-9+n-11)	0.9
22:1	0.1
24:1	1.0
Total	**17.4**
Polyunsaturates	
18:2(n-6)	1.0
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.2
20:2(n-6)	0.2
20:3(n-6)	0.3
20:4(n-3)	0.4
20:4(n-6) AA	6.2
20:5(n-3) EPA	3.0
22:3(n-3)	0.1
22:4(n-6)	1.1
22:5(n-3)	1.6
22:5(n-6)	3.4
22:6(n-3) DHA	27.4
Total	**45.1**

Murray cod *Maccullochella peelii* 37 311076



Summary

Oil	0.7 %
	mg/100g (wet)
20:4(n-6) AA	23
20:5(n-3) EPA	31
22:6(n-3) DHA	112
(n-3)/(n-6)	3.1

Oil Content

Oil Class	mg/100g (wet)
Total oil	**704**
Wax ester*	0
Triglyceride	92
Free fatty acid	18
Cholesterol	31
Polar oil	563

Fatty Acids

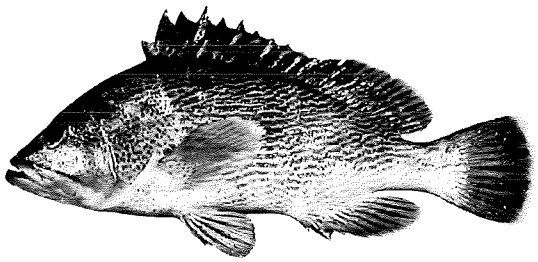
Total fatty acids	**518**
Total saturates	150
Total monounsaturates	140
Total polyunsaturates	228
Total (n-3)	172
Total (n-6)	55

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.0
15:0	0.2
16:0	19.3
17:0	0.6
18:0	7.1
20:0	0.2
22:0	0.1
24:0	0.1
Total	**29.0**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	4.3
16:1(n-9)	0.3
17:1(n-8)	0.4
18:1(n-7)	3.1
18:1(n-9)	14.6
20:1(n-7)	0.1
20:1(n-9+n-11)	1.5
22:1	0.4
24:1	0.6
Total	**25.8**
Polyunsaturates	
18:2(n-6)	4.4
18:3(n-3)	0.0
18:3(n-6)	0.3
18:4(n-3)	0.9
20:2(n-6)	0.2
20:3(n-6)	0.3
20:4(n-3)	0.7
20:4(n-6) AA	5.2
20:5(n-3) EPA	6.1
22:3(n-3)	0.0
22:4(n-6)	0.5
22:5(n-3)	4.1
22:5(n-6)	0.7
22:6(n-3) DHA	21.8
Total	**45.3**

Maori rockcod *Epinephelus undulatostriatus* 37 311086



Summary

Oil	0.6 %
	mg/100g (wet)
20:4(n-6) AA	19
20:5(n-3) EPA	10
22:6(n-3) DHA	98
(n-3)/(n-6)	3.0

Oil Content

Oil Class	mg/100g (wet)
Total oil	**633**
Wax ester*	0
Triglyceride	36
Free fatty acid	14
Cholesterol	30
Polar oil	553
Fatty Acids	
Total fatty acids	**360**
Total saturates	124
Total monounsaturates	78
Total polyunsaturates	158
Total (n-3)	119
Total (n-6)	39

*includes hydrocarbon and steryl ester

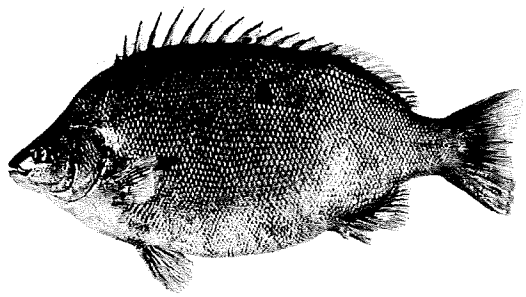
Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.7
15:0	0.3
16:0	22.5
17:0	0.7
18:0	9.6
20:0	0.2
22:0	0.1
24:0	0.3
Total	**34.6**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	3.4
16:1(n-9)	0.1
17:1(n-8)	0.4
18:1(n-7)	1.9
18:1(n-9)	13.1
20:1(n-7)	0.1
20:1(n-9+n-11)	0.8
22:1	0.1
24:1	1.6
Total	**21.6**
Polyunsaturates	
18:2(n-6)	1.0
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.1
20:2(n-6)	0.3
20:3(n-6)	0.2
20:4(n-3)	0.4
20:4(n-6) AA	5.3
20:5(n-3) EPA	2.7
22:3(n-3)	0.0
22:4(n-6)	1.4
22:5(n-3)	2.3
22:5(n-6)	2.4
22:6(n-3) DHA	27.6
Total	**43.9**

striped perch† *Scortum barcoo*

37 321025

†cultured samples



Summary

Oil	16.3 %
	mg/100g (wet)
20:4(n-6) AA	97
20:5(n-3) EPA	1190
22:6(n-3) DHA	1540
(n-3)/(n-6)	5.8

Oil Content

Oil Class	mg/100g (wet)
Total oil	**16329**
Wax ester*	0
Triglyceride	16023
Free fatty acid	20
Cholesterol	37
Polar oil	250

Fatty Acids

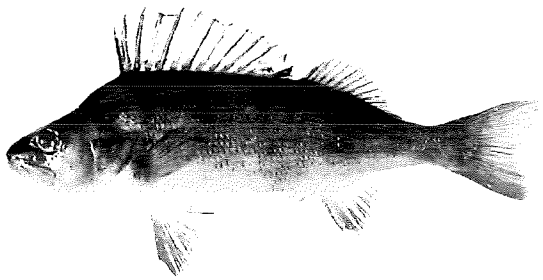
Total fatty acids	**15785**
Total saturates	5437
Total monounsaturates	5267
Total polyunsaturates	4938
Total (n-3)	3869
Total (n-6)	667

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	6.1
15:0	0.4
16:0	21.9
17:0	0.3
18:0	4.3
20:0	0.2
22:0	0.1
24:0	0.1
Total	**34.5**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	7.8
16:1(n-9)	0.3
17:1(n-8)	0.4
18:1(n-7)	2.8
18:1(n-9)	20.2
20:1(n-7)	0.2
20:1(n-9+n-11)	1.0
22:1	0.5
24:1	0.3
Total	**33.7**
Polyunsaturates	
18:2(n-6)	2.6
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	2.2
20:2(n-6)	0.1
20:3(n-6)	0.2
20:4(n-3)	1.0
20:4(n-6) AA	0.6
20:5(n-3) EPA	7.4
22:3(n-3)	0.0
22:4(n-6)	0.2
22:5(n-3)	3.9
22:5(n-6)	0.2
22:6(n-3) DHA	9.7
Total	**30.8**

redfin *Perca fluviatilis* 37 329001



Summary

Oil	1.2 %
	mg/100g (wet)
20:4(n-6) AA	49
20:5(n-3) EPA	73
22:6(n-3) DHA	107
(n-3)/(n-6)	2.4

Oil Content

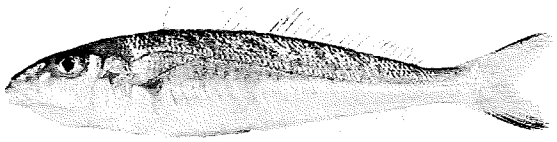
Oil Class	mg/100g (wet)
Total oil	**1186**
Wax ester*	30
Triglyceride	147
Free fatty acid	44
Cholesterol	65
Polar oil	900
Fatty Acids	
Total fatty acids	**661**
Total saturates	195
Total monounsaturates	167
Total polyunsaturates	297
Total (n-3)	209
Total (n-6)	87

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.8
15:0	0.6
16:0	20.3
17:0	0.9
18:0	6.0
20:0	0.2
22:0	0.2
24:0	0.1
Total	**29.6**
Monounsaturates	
16:1(n-5)	0.6
16:1(n-7)	7.0
16:1(n-9)	0.5
17:1(n-8)	1.1
18:1(n-7)	4.9
18:1(n-9)	9.3
20:1(n-7)	0.2
20:1(n-9+n-11)	0.5
22:1	0.4
24:1	0.5
Total	**25.3**
Polyunsaturates	
18:2(n-6)	2.5
18:3(n-3)	0.2
18:3(n-6)	0.4
18:4(n-3)	0.5
20:2(n-6)	0.2
20:3(n-6)	0.4
20:4(n-3)	0.3
20:4(n-6) AA	7.4
20:5(n-3) EPA	11.0
22:3(n-3)	0.0
22:4(n-6)	0.9
22:5(n-3)	3.4
22:5(n-6)	1.2
22:6(n-3) DHA	16.2
Total	**45.0**

school whiting *Sillago bassensis* 37 330002



Summary

Oil	0.7 %
	mg/100g (wet)
20:4(n-6) AA	53
20:5(n-3) EPA	43
22:6(n-3) DHA	115
(n-3)/(n-6)	2.1

Oil Content

Oil Class	mg/100g (wet)
Total oil	**698**
Wax ester*	31
Triglyceride	12
Free fatty acid	34
Cholesterol	33
Polar oil	588

Fatty Acids

Total fatty acids	**464**
Total saturates	135
Total monounsaturates	66
Total polyunsaturates	262
Total (n-3)	179
Total (n-6)	84

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.8
15:0	0.6
16:0	17.4
17:0	1.0
18:0	7.9
20:0	0.2
22:0	0.2
24:0	0.2
Total	**29.1**
Monounsaturates	
16:1(n-5)	0.3
16:1(n-7)	2.1
16:1(n-9)	0.2
17:1(n-8)	0.7
18:1(n-7)	2.1
18:1(n-9)	6.7
20:1(n-7)	0.3
20:1(n-9+n-11)	1.0
22:1	0.2
24:1	0.5
Total	**14.3**
Polyunsaturates	
18:2(n-6)	1.0
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.4
20:2(n-6)	0.5
20:3(n-6)	0.4
20:4(n-3)	0.5
20:4(n-6) AA	11.4
20:5(n-3) EPA	9.3
22:3(n-3)	0.2
22:4(n-6)	2.7
22:5(n-3)	3.4
22:5(n-6)	1.8
22:6(n-3) DHA	24.8
Total	**56.6**

black kingfish *Rachycentron canadum* 37 335001

Summary

Oil	0.7 %
	mg/100g (wet)
20:4(n-6) AA	48
20:5(n-3) EPA	16
22:6(n-3) DHA	83
(n-3)/(n-6)	1.5

Oil Content

Oil Class	mg/100g (wet)
Total oil	**732**
Wax ester*	0
Triglyceride	23
Free fatty acid	8
Cholesterol	21
Polar oil	680
Fatty Acids	
Total fatty acids	**399**
Total saturates	131
Total monounsaturates	86
Total polyunsaturates	183
Total (n-3)	109
Total (n-6)	73

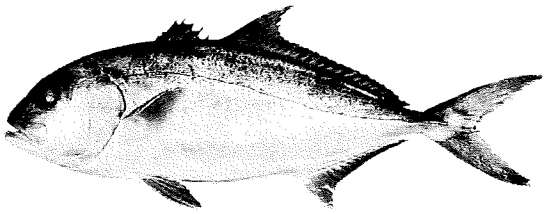
*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.6
15:0	0.4
16:0	17.3
17:0	0.9
18:0	12.6
20:0	0.2
22:0	0.2
24:0	0.2
Total	**32.8**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	2.7
16:1(n-9)	0.1
17:1(n-8)	0.6
18:1(n-7)	2.4
18:1(n-9)	12.7
20:1(n-7)	0.2
20:1(n-9+n-11)	1.0
22:1	0.9
24:1	0.7
Total	**21.5**
Polyunsaturates	
18:2(n-6)	0.8
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.3
20:2(n-6)	0.3
20:3(n-6)	0.3
20:4(n-3)	0.2
20:4(n-6) AA	12.1
20:5(n-3) EPA	4.0
22:3(n-3)	0.2
22:4(n-6)	2.0
22:5(n-3)	2.0
22:5(n-6)	2.8
22:6(n-3) DHA	20.7
Total	**45.8**

samson fish *Seriola hippos*

37 337007



Summary

Oil	1.4 %
	mg/100g (wet)
20:4(n-6) AA	19
20:5(n-3) EPA	31
22:6(n-3) DHA	207
(n-3)/(n-6)	5.7

Oil Content

Oil Class	mg/100g (wet)
Total oil	**1418**
Wax ester*	0
Triglyceride	522
Free fatty acid	10
Cholesterol	33
Polar oil	853

Fatty Acids

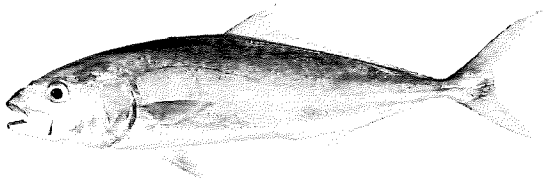
Total fatty acids	**786**
Total saturates	261
Total monounsaturates	211
Total polyunsaturates	314
Total (n-3)	267
Total (n-6)	47

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.0
15:0	0.4
16:0	19.8
17:0	0.9
18:0	9.6
20:0	0.3
22:0	0.2
24:0	0.1
Total	**32.6**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	2.7
16:1(n-9)	0.2
17:1(n-8)	0.4
18:1(n-7)	2.7
18:1(n-9)	12.6
20:1(n-7)	0.2
20:1(n-9+n-11)	0.7
22:1	0.7
24:1	0.9
Total	**21.3**
Polyunsaturates	
18:2(n-6)	1.0
18:3(n-3)	0.1
18:3(n-6)	0.0
18:4(n-3)	0.6
20:2(n-6)	0.3
20:3(n-6)	0.2
20:4(n-3)	0.4
20:4(n-6) AA	3.4
20:5(n-3) EPA	4.4
22:3(n-3)	0.0
22:4(n-6)	0.8
22:5(n-3)	2.6
22:5(n-6)	1.9
22:6(n-3) DHA	30.3
Total	**46.1**

samson fish *Seriola dumerili* 37 337025



Summary

Oil	0.9 %
	mg/100g (wet)
20:4(n-6) AA	26
20:5(n-3) EPA	20
22:6(n-3) DHA	139
(n-3)/(n-6)	3.2

Oil Content

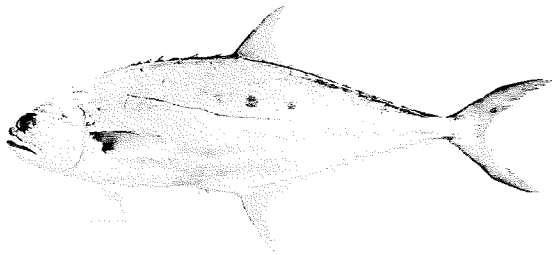
Oil Class	mg/100g (wet)
Total oil	**895**
Wax ester*	0
Triglyceride	110
Free fatty acid	9
Cholesterol	32
Polar oil	744
Fatty Acids	
Total fatty acids	**486**
Total saturates	186
Total monounsaturates	79
Total polyunsaturates	221
Total (n-3)	167
Total (n-6)	53

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.9
15:0	0.5
16:0	25.4
17:0	0.9
18:0	10.8
20:0	0.2
22:0	0.2
24:0	0.2
Total	**39.5**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	1.8
16:1(n-9)	0.2
17:1(n-8)	0.4
18:1(n-7)	2.4
18:1(n-9)	8.0
20:1(n-7)	0.1
20:1(n-9+n-11)	0.6
22:1	0.4
24:1	1.0
Total	**15.1**
Polyunsaturates	
18:2(n-6)	0.8
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.2
20:2(n-6)	0.2
20:3(n-6)	0.2
20:4(n-3)	0.3
20:4(n-6) AA	5.4
20:5(n-3) EPA	4.0
22:3(n-3)	0.0
22:4(n-6)	1.8
22:5(n-3)	1.6
22:5(n-6)	2.1
22:6(n-3) DHA	28.3
Total	**45.3**

queenfish *Scomberoides commersonnianus* 37 337032



Summary

Oil	0.6 %
	mg/100g (wet)
20:4(n-6) AA	29
20:5(n-3) EPA	11
22:6(n-3) DHA	120
(n-3)/(n-6)	2.7

Oil Content

Oil Class	mg/100g (wet)
Total oil	**621**
Wax ester*	0
Triglyceride	13
Free fatty acid	20
Cholesterol	25
Polar oil	563

Fatty Acids

Total fatty acids	**362**
Total saturates	122
Total monounsaturates	48
Total polyunsaturates	192
Total (n-3)	140
Total (n-6)	52

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.2
15:0	0.3
16:0	17.4
17:0	1.0
18:0	13.9
20:0	0.1
22:0	0.2
24:0	0.4
Total	**33.8**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	0.9
16:1(n-9)	0.0
17:1(n-8)	0.4
18:1(n-7)	2.1
18:1(n-9)	7.5
20:1(n-7)	0.1
20:1(n-9+n-11)	0.5
22:1	0.5
24:1	1.1
Total	**13.2**
Polyunsaturates	
18:2(n-6)	0.6
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.2
20:2(n-6)	0.2
20:3(n-6)	0.3
20:4(n-3)	0.2
20:4(n-6) AA	7.9
20:5(n-3) EPA	3.1
22:3(n-3)	0.0
22:4(n-6)	1.5
22:5(n-3)	2.1
22:5(n-6)	3.7
22:6(n-3) DHA	33.2
Total	**53.0**

turrum *Carangoides fulvoguttatus* 37 337037

Summary

Oil	0.9 %
	mg/100g (wet)
20:4(n-6) AA	27
20:5(n-3) EPA	15
22:6(n-3) DHA	149
(n-3)/(n-6)	3.3

Oil Content

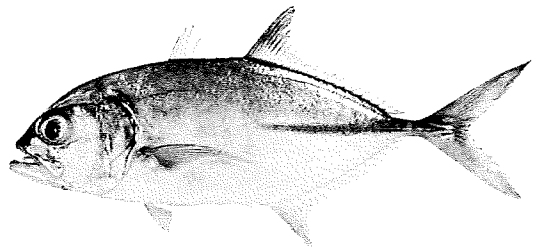
Oil Class	mg/100g (wet)
Total oil	**947**
Wax ester*	0
Triglyceride	67
Free fatty acid	7
Cholesterol	38
Polar oil	835
Fatty Acids	
Total fatty acids	**473**
Total saturates	171
Total monounsaturates	75
Total polyunsaturates	226
Total (n-3)	174
Total (n-6)	52

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.5
15:0	0.4
16:0	21.6
17:0	0.9
18:0	11.7
20:0	0.2
22:0	0.2
24:0	0.4
Total	**36.2**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	1.6
16:1(n-9)	0.1
17:1(n-8)	0.4
18:1(n-7)	2.3
18:1(n-9)	9.1
20:1(n-7)	0.1
20:1(n-9+n-11)	0.4
22:1	0.5
24:1	1.1
Total	**15.6**
Polyunsaturates	
18:2(n-6)	0.7
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.2
20:2(n-6)	0.2
20:3(n-6)	0.3
20:4(n-3)	0.2
20:4(n-6) AA	5.7
20:5(n-3) EPA	3.1
22:3(n-3)	0.0
22:4(n-6)	1.1
22:5(n-3)	1.7
22:5(n-6)	2.7
22:6(n-3) DHA	32.0
Total	**48.2**

bigeye trevally *Caranx sexfasciatus* 37 337039



Summary

Oil	4.7 %
	mg/100g (wet)
20:4(n-6) AA	119
20:5(n-3) EPA	185
22:6(n-3) DHA	375
(n-3)/(n-6)	2.5

Oil Content

Oil Class	mg/100g (wet)
Total oil	**4748**
Wax ester*	0
Triglyceride	3844
Free fatty acid	14
Cholesterol	32
Polar oil	858

Fatty Acids

Total fatty acids	**3758**
Total saturates	1483
Total monounsaturates	1275
Total polyunsaturates	1000
Total (n-3)	709
Total (n-6)	282

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.0
15:0	0.4
16:0	22.7
17:0	1.1
18:0	11.2
20:0	0.4
22:0	0.4
24:0	0.3
Total	**38.2**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	3.8
16:1(n-9)	0.2
17:1(n-8)	0.6
18:1(n-7)	3.1
18:1(n-9)	18.2
20:1(n-7)	0.2
20:1(n-9+n-11)	0.8
22:1	0.4
24:1	0.6
Total	**28.2**
Polyunsaturates	
18:2(n-6)	1.5
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.6
20:2(n-6)	0.3
20:3(n-6)	0.3
20:4(n-3)	0.5
20:4(n-6) AA	4.7
20:5(n-3) EPA	4.4
22:3(n-3)	0.2
22:4(n-6)	1.0
22:5(n-3)	2.4
22:5(n-6)	1.7
22:6(n-3) DHA	15.8
Total	**33.7**

dart *Trachinotus botla* 37 337066

Summary

Oil	1.2 %
	mg/100g (wet)
20:4(n-6) AA	21
20:5(n-3) EPA	22
22:6(n-3) DHA	151
(n-3)/(n-6)	3.9

Oil Content

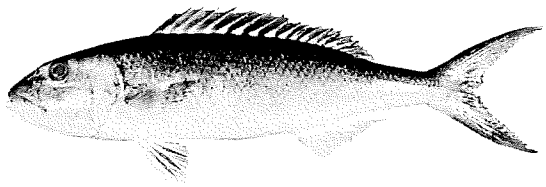
Oil Class	mg/100g (wet)
Total oil	**1196**
Wax ester*	0
Triglyceride	388
Free fatty acid	18
Cholesterol	34
Polar oil	756
Fatty Acids	
Total fatty acids	**641**
Total saturates	247
Total monounsaturates	139
Total polyunsaturates	255
Total (n-3)	202
Total (n-6)	52

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.8
15:0	0.6
16:0	21.9
17:0	1.1
18:0	10.8
20:0	0.4
22:0	0.4
24:0	0.3
Total	**38.1**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	2.9
16:1(n-9)	0.2
17:1(n-8)	0.5
18:1(n-7)	2.1
18:1(n-9)	12.2
20:1(n-7)	0.2
20:1(n-9+n-11)	1.0
22:1	0.5
24:1	0.9
Total	**20.5**
Polyunsaturates	
18:2(n-6)	1.6
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.7
20:2(n-6)	0.6
20:3(n-6)	0.2
20:4(n-3)	0.5
20:4(n-6) AA	3.5
20:5(n-3) EPA	3.4
22:3(n-3)	0.1
22:4(n-6)	0.7
22:5(n-3)	3.1
22:5(n-6)	1.7
22:6(n-3) DHA	25.1
Total	**41.3**

green jobfish *Aprion virescens* 37 346027



Summary

Oil	0.4 %
	mg/100g (wet)
20:4(n-6) AA	33
20:5(n-3) EPA	5
22:6(n-3) DHA	88
(n-3)/(n-6)	1.5

Oil Content

Oil Class	mg/100g (wet)
Total oil	**432**
Wax ester*	0
Triglyceride	3
Free fatty acid	65
Cholesterol	22
Polar oil	342

Fatty Acids

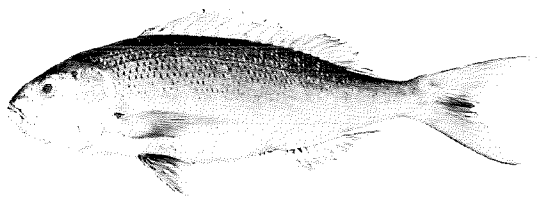
Total fatty acids	**303**
Total saturates	80
Total monounsaturates	55
Total polyunsaturates	167
Total (n-3)	99
Total (n-6)	68

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.2
15:0	0.3
16:0	13.3
17:0	0.7
18:0	10.0
20:0	0.2
22:0	0.2
24:0	0.6
Total	**26.6**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	3.1
16:1(n-9)	0.0
17:1(n-8)	0.4
18:1(n-7)	2.5
18:1(n-9)	9.3
20:1(n-7)	0.1
20:1(n-9+n-11)	0.4
22:1	0.1
24:1	2.2
Total	**18.2**
Polyunsaturates	
18:2(n-6)	1.2
18:3(n-3)	0.0
18:3(n-6)	0.6
18:4(n-3)	0.1
20:2(n-6)	0.5
20:3(n-6)	0.4
20:4(n-3)	0.2
20:4(n-6) AA	10.7
20:5(n-3) EPA	1.7
22:3(n-3)	0.0
22:4(n-6)	2.3
22:5(n-3)	1.6
22:5(n-6)	6.7
22:6(n-3) DHA	29.2
Total	**55.2**

king snapper *Pristipomoides filamentosus* 37 346032



Summary

Oil	0.5 %
	mg/100g (wet)
20:4(n-6) AA	14
20:5(n-3) EPA	5
22:6(n-3) DHA	72
(n-3)/(n-6)	2.0

Oil Content

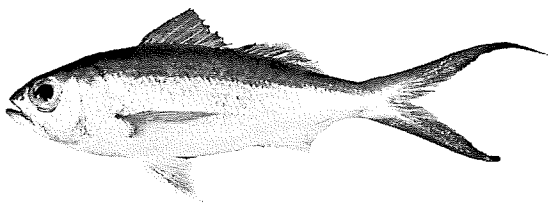
Oil Class	mg/100g (wet)
Total oil	**509**
Wax ester*	0
Triglyceride	5
Free fatty acid	36
Cholesterol	21
Polar oil	446
Fatty Acids	
Total fatty acids	**253**
Total saturates	99
Total monounsaturates	32
Total polyunsaturates	120
Total (n-3)	82
Total (n-6)	38

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.5
15:0	0.6
16:0	25.5
17:0	0.9
18:0	10.5
20:0	0.4
22:0	0.2
24:0	0.2
Total	**39.1**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	0.8
16:1(n-9)	0.1
17:1(n-8)	0.3
18:1(n-7)	1.3
18:1(n-9)	7.3
20:1(n-7)	0.1
20:1(n-9+n-11)	0.6
22:1	0.5
24:1	1.6
Total	**12.7**
Polyunsaturates	
18:2(n-6)	1.2
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.1
20:2(n-6)	0.4
20:3(n-6)	0.3
20:4(n-3)	0.2
20:4(n-6) AA	5.7
20:5(n-3) EPA	1.9
22:3(n-3)	0.0
22:4(n-6)	1.3
22:5(n-3)	1.8
22:5(n-6)	6.0
22:6(n-3) DHA	28.9
Total	**48.1**

ruby snapper *Etelis coruscans* 37 346038



Summary

Oil	0.6 %
	mg/100g (wet)
20:4(n-6) AA	21
20:5(n-3) EPA	15
22:6(n-3) DHA	155
(n-3)/(n-6)	4.9

Oil Content

Oil Class	mg/100g (wet)
Total oil	**557**
Wax ester*	1
Triglyceride	1
Free fatty acid	59
Cholesterol	22
Polar oil	474

Fatty Acids

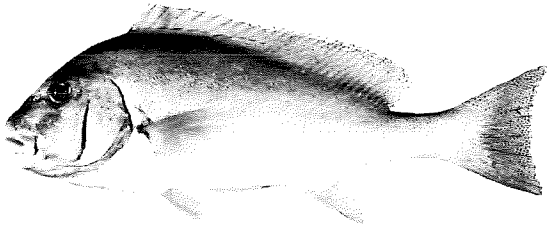
Total fatty acids	**384**
Total saturates	129
Total monounsaturates	44
Total polyunsaturates	211
Total (n-3)	175
Total (n-6)	36

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.3
15:0	0.3
16:0	21.6
17:0	0.8
18:0	8.4
20:0	0.2
22:0	0.1
24:0	0.1
Total	**31.8**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	0.8
16:1(n-9)	0.0
17:1(n-8)	0.3
18:1(n-7)	1.7
18:1(n-9)	5.5
20:1(n-7)	0.1
20:1(n-9+n-11)	1.3
22:1	0.2
24:1	0.9
Total	**10.8**
Polyunsaturates	
18:2(n-6)	0.5
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.1
20:2(n-6)	0.3
20:3(n-6)	0.1
20:4(n-3)	0.1
20:4(n-6) AA	5.2
20:5(n-3) EPA	3.6
22:3(n-3)	0.0
22:4(n-6)	0.4
22:5(n-3)	1.2
22:5(n-6)	2.2
22:6(n-3) DHA	38.3
Total	**52.2**

sweetlip bream *Diagramma labiosum* 37 350003



Summary

Oil	0.7 %
	mg/100g (wet)
20:4(n-6) AA	30
20:5(n-3) EPA	15
22:6(n-3) DHA	133
(n-3)/(n-6)	2.5

Oil Content

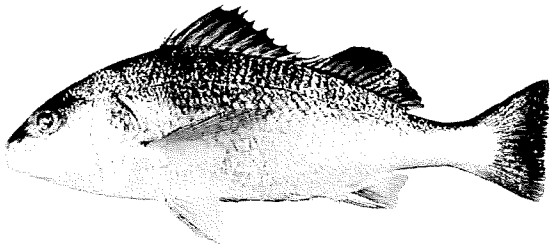
Oil Class	mg/100g (wet)
Total oil	**701**
Wax ester*	0
Triglyceride	2
Free fatty acid	19
Cholesterol	37
Polar oil	644
Fatty Acids	
Total fatty acids	**391**
Total saturates	112
Total monounsaturates	56
Total polyunsaturates	223
Total (n-3)	160
Total (n-6)	63

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.4
15:0	0.4
16:0	14.1
17:0	1.0
18:0	11.0
20:0	0.2
22:0	0.3
24:0	0.7
Total	**28.6**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	1.3
16:1(n-9)	0.1
17:1(n-8)	0.5
18:1(n-7)	2.0
18:1(n-9)	8.0
20:1(n-7)	0.1
20:1(n-9+n-11)	0.4
22:1	0.2
24:1	1.6
Total	**14.3**
Polyunsaturates	
18:2(n-6)	1.2
18:3(n-3)	0.0
18:3(n-6)	0.4
18:4(n-3)	0.2
20:2(n-6)	0.4
20:3(n-6)	0.4
20:4(n-3)	0.2
20:4(n-6) AA	7.8
20:5(n-3) EPA	3.9
22:3(n-3)	0.0
22:4(n-6)	2.4
22:5(n-3)	2.8
22:5(n-6)	3.7
22:6(n-3) DHA	33.9
Total	**57.2**

grunter bream *Pomadasys kaakan* 37 350011



Summary

Oil	0.8 %
	mg/100g (wet)
20:4(n-6) AA	40
20:5(n-3) EPA	21
22:6(n-3) DHA	123
(n-3)/(n-6)	2.2

Oil Content

Oil Class	mg/100g (wet)
Total oil	**790**
Wax ester*	0
Triglyceride	175
Free fatty acid	4
Cholesterol	24
Polar oil	587

Fatty Acids

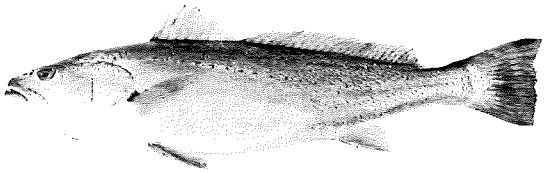
Total fatty acids	**548**
Total saturates	187
Total monounsaturates	118
Total polyunsaturates	242
Total (n-3)	166
Total (n-6)	76

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.0
15:0	0.4
16:0	19.4
17:0	0.9
18:0	10.7
20:0	0.3
22:0	0.2
24:0	0.2
Total	**33.4**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	2.7
16:1(n-9)	0.1
17:1(n-8)	0.5
18:1(n-7)	2.2
18:1(n-9)	12.9
20:1(n-7)	0.1
20:1(n-9+n-11)	0.8
22:1	0.2
24:1	0.5
Total	**20.3**
Polyunsaturates	
18:2(n-6)	1.1
18:3(n-3)	0.0
18:3(n-6)	0.3
18:4(n-3)	0.3
20:2(n-6)	0.3
20:3(n-6)	0.4
20:4(n-3)	0.5
20:4(n-6) AA	7.8
20:5(n-3) EPA	4.0
22:3(n-3)	0.1
22:4(n-6)	1.9
22:5(n-3)	3.1
22:5(n-6)	2.8
22:6(n-3) DHA	23.6
Total	**46.3**

mulloway *Argyrosomus hololepidotus* 37 354001



Summary

Oil	0.6 %
	mg/100g (wet)
20:4(n-6) AA	29
20:5(n-3) EPA	17
22:6(n-3) DHA	72
(n-3)/(n-6)	2.5

Oil Content

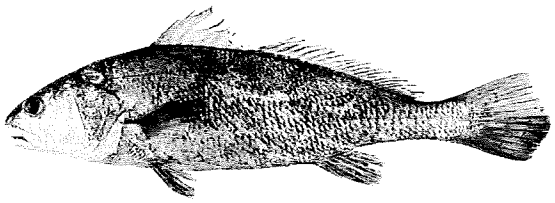
Oil Class	mg/100g (wet)
Total oil	**635**
Wax ester*	0
Triglyceride	96
Free fatty acid	16
Cholesterol	22
Polar oil	501
Fatty Acids	
Total fatty acids	**315**
Total saturates	98
Total monounsaturates	69
Total polyunsaturates	148
Total (n-3)	105
Total (n-6)	42

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.5
15:0	0.3
16:0	18.8
17:0	0.5
18:0	10.3
20:0	0.2
22:0	0.1
24:0	0.1
Total	**30.8**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	2.5
16:1(n-9)	0.2
17:1(n-8)	0.4
18:1(n-7)	2.3
18:1(n-9)	11.6
20:1(n-7)	0.1
20:1(n-9+n-11)	1.4
22:1	0.5
24:1	1.8
Total	**21.1**
Polyunsaturates	
18:2(n-6)	0.0
18:3(n-3)	1.4
18:3(n-6)	0.2
18:4(n-3)	0.3
20:2(n-6)	0.4
20:3(n-6)	0.3
20:4(n-3)	0.4
20:4(n-6) AA	9.9
20:5(n-3) EPA	5.5
22:3(n-3)	0.0
22:4(n-6)	1.6
22:5(n-3)	2.9
22:5(n-6)	1.8
22:6(n-3) DHA	23.3
Total	**48.1**

black jewfish *Protonibea diacanthus* 37 354003



Summary

Oil	0.6 %
	mg/100g (wet)
20:4(n-6) AA	26
20:5(n-3) EPA	9
22:6(n-3) DHA	44
(n-3)/(n-6)	1.5

Oil Content

Oil Class	mg/100g (wet)
Total oil	**588**
Wax ester*	0
Triglyceride	2
Free fatty acid	10
Cholesterol	33
Polar oil	543

Fatty Acids

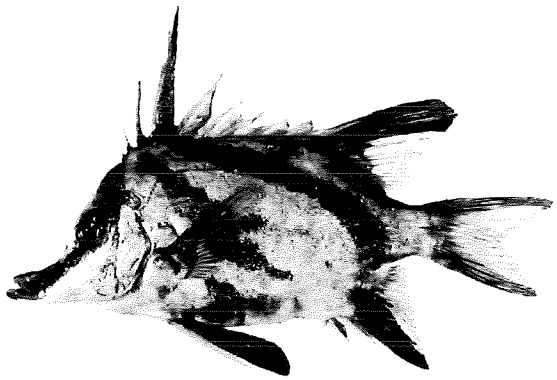
Total fatty acids	**206**
Total saturates	67
Total monounsaturates	42
Total polyunsaturates	97
Total (n-3)	58
Total (n-6)	38

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.5
15:0	0.3
16:0	17.4
17:0	0.7
18:0	11.9
20:0	0.1
22:0	0.2
24:0	0.2
Total	**32.6**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	1.6
16:1(n-9)	0.1
17:1(n-8)	0.5
18:1(n-7)	2.0
18:1(n-9)	11.0
20:1(n-7)	0.1
20:1(n-9+n-11)	1.0
22:1	1.5
24:1	2.5
Total	**20.4**
Polyunsaturates	
18:2(n-6)	0.3
18:3(n-3)	0.3
18:3(n-6)	0.1
18:4(n-3)	0.1
20:2(n-6)	0.3
20:3(n-6)	0.2
20:4(n-3)	0.2
20:4(n-6) AA	12.7
20:5(n-3) EPA	4.2
22:3(n-3)	0.0
22:4(n-6)	2.1
22:5(n-3)	2.2
22:5(n-6)	2.9
22:6(n-3) DHA	21.3
Total	**47.0**

boarfish *Pentaceropsis recurvirostris* 37 367003



Summary

Oil	0.8 %
	mg/100g (wet)
20:4(n-6) AA	52
20:5(n-3) EPA	61
22:6(n-3) DHA	107
(n-3)/(n-6)	2.8

Oil Content

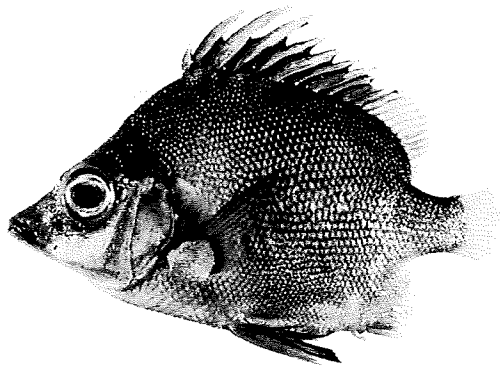
Oil Class	mg/100g (wet)
Total oil	**827**
Wax ester*	0
Triglyceride	133
Free fatty acid	35
Cholesterol	29
Polar oil	631
Fatty Acids	
Total fatty acids	**569**
Total saturates	178
Total monounsaturates	136
Total polyunsaturates	255
Total (n-3)	188
Total (n-6)	67

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.5
15:0	0.3
16:0	17.7
17:0	0.7
18:0	10.2
20:0	0.2
22:0	0.1
24:0	0.2
Total	**31.3**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	2.6
16:1(n-9)	0.1
17:1(n-8)	0.4
18:1(n-7)	2.4
18:1(n-9)	12.1
20:1(n-7)	0.1
20:1(n-9+n-11)	2.4
22:1	1.1
24:1	1.1
Total	**22.6**
Polyunsaturates	
18:2(n-6)	0.5
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.4
20:2(n-6)	0.4
20:3(n-6)	0.2
20:4(n-3)	0.4
20:4(n-6) AA	9.2
20:5(n-3) EPA	10.7
22:3(n-3)	0.1
22:4(n-6)	0.7
22:5(n-3)	2.9
22:5(n-6)	0.6
22:6(n-3) DHA	19.7
Total	**46.1**

bigspine boarfish *Pentaceros decacanthus* 37 367004



Summary

Oil	1.5 %
	mg/100g (wet)
20:4(n-6) AA	58
20:5(n-3) EPA	63
22:6(n-3) DHA	269
(n-3)/(n-6)	3.8

Oil Content

Oil Class	mg/100g (wet)
Total oil	**1485**
Wax ester*	0
Triglyceride	475
Free fatty acid	232
Cholesterol	41
Polar oil	737

Fatty Acids

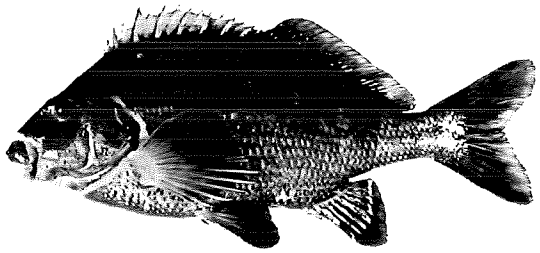
Total fatty acids	**997**
Total saturates	306
Total monounsaturates	245
Total polyunsaturates	447
Total (n-3)	354
Total (n-6)	92

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.6
15:0	0.8
16:0	19.9
17:0	0.9
18:0	5.9
20:0	0.2
22:0	0.0
24:0	0.0
Total	**30.7**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	2.3
16:1(n-9)	0.3
17:1(n-8)	0.7
18:1(n-7)	2.6
18:1(n-9)	12.3
20:1(n-7)	0.6
20:1(n-9+n-11)	2.4
22:1	1.7
24:1	0.8
Total	**24.1**
Polyunsaturates	
18:2(n-6)	0.9
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.7
20:2(n-6)	0.3
20:3(n-6)	0.1
20:4(n-3)	0.3
20:4(n-6) AA	5.9
20:5(n-3) EPA	6.3
22:3(n-3)	0.0
22:4(n-6)	0.4
22:5(n-3)	1.3
22:5(n-6)	1.7
22:6(n-3) DHA	27.1
Total	**45.2**

banded morwong *Cheilodactylus spectablis* 37 377006



Summary

Oil	3.2 %
	mg/100g (wet)
20:4(n-6) AA	184
20:5(n-3) EPA	298
22:6(n-3) DHA	296
(n-3)/(n-6)	2.3

Oil Content

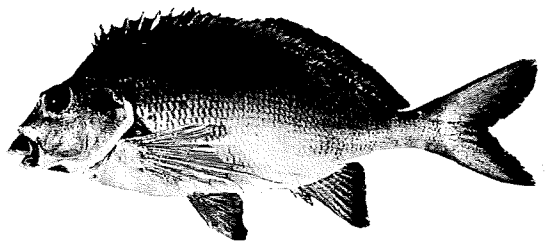
Oil Class	mg/100g (wet)
Total oil	**3169**
Wax ester*	0
Triglyceride	2767
Free fatty acid	197
Cholesterol	30
Polar oil	176
Fatty Acids	
Total fatty acids	**3287**
Total saturates	889
Total monounsaturates	1215
Total polyunsaturates	1182
Total (n-3)	820
Total (n-6)	360

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.1
15:0	0.4
16:0	14.7
17:0	0.8
18:0	7.4
20:0	0.4
22:0	0.2
24:0	0.3
Total	**27.1**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	3.6
16:1(n-9)	0.4
17:1(n-8)	0.5
18:1(n-7)	3.9
18:1(n-9)	23.0
20:1(n-7)	0.6
20:1(n-9+n-11)	3.4
22:1	0.8
24:1	0.6
Total	**37.0**
Polyunsaturates	
18:2(n-6)	1.3
18:3(n-3)	0.0
18:3(n-6)	0.4
18:4(n-3)	0.4
20:2(n-6)	0.7
20:3(n-6)	0.5
20:4(n-3)	1.1
20:4(n-6) AA	5.9
20:5(n-3) EPA	8.5
22:3(n-3)	0.6
22:4(n-6)	2.0
22:5(n-3)	5.1
22:5(n-6)	0.5
22:6(n-3) DHA	8.9
Total	**36.0**

red morwong *Cheilodactylus fuscus* 37 377009



Summary

Oil	0.5 %
	mg/100g (wet)
20:4(n-6) AA	43
20:5(n-3) EPA	68
22:6(n-3) DHA	44
(n-3)/(n-6)	1.9

Oil Content

Oil Class	mg/100g (wet)
Total oil	**470**
Wax ester*	0
Triglyceride	29
Free fatty acid	250
Cholesterol	45
Polar oil	145

Fatty Acids

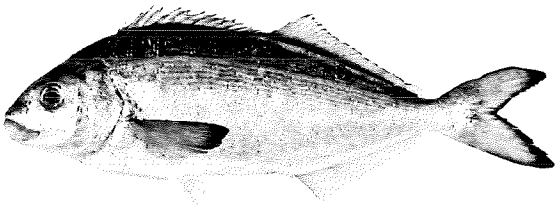
Total fatty acids	**418**
Total saturates	111
Total monounsaturates	121
Total polyunsaturates	186
Total (n-3)	123
Total (n-6)	63

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.7
15:0	1.0
16:0	12.0
17:0	1.3
18:0	7.9
20:0	1.2
22:0	0.6
24:0	0.0
Total	**26.5**
Monounsaturates	
16:1(n-5)	0.3
16:1(n-7)	5.9
16:1(n-9)	0.2
17:1(n-8)	1.4
18:1(n-7)	3.7
18:1(n-9)	14.5
20:1(n-7)	0.3
20:1(n-9+n-11)	2.1
22:1	0.3
24:1	0.0
Total	**29.0**
Polyunsaturates	
18:2(n-6)	1.7
18:3(n-3)	0.0
18:3(n-6)	0.6
18:4(n-3)	0.3
20:2(n-6)	0.6
20:3(n-6)	0.9
20:4(n-3)	0.5
20:4(n-6) AA	10.4
20:5(n-3) EPA	16.2
22:3(n-3)	0.0
22:4(n-6)	0.6
22:5(n-3)	1.8
22:5(n-6)	0.4
22:6(n-3) DHA	10.6
Total	**44.5**

trumpeter *Latridopsis forsteri* 37 378002



Summary

Oil	2.6 %
	mg/100g (wet)
20:4(n-6) AA	47
20:5(n-3) EPA	79
22:6(n-3) DHA	100
(n-3)/(n-6)	2.4

Oil Content

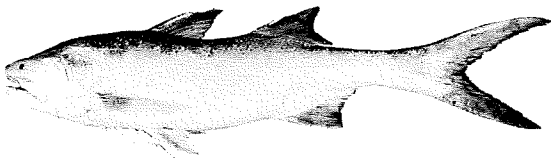
Oil Class	mg/100g (wet)
Total oil	**2610**
Wax ester*	0
Triglyceride	1670
Free fatty acid	238
Cholesterol	50
Polar oil	652
Fatty Acids	
Total fatty acids	**1542**
Total saturates	560
Total monounsaturates	629
Total polyunsaturates	353
Total (n-3)	247
Total (n-6)	103

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	3.0
15:0	0.5
16:0	24.3
17:0	1.0
18:0	7.4
20:0	0.3
22:0	0.2
24:0	0.1
Total	**37.7**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	4.1
16:1(n-9)	0.6
17:1(n-8)	0.7
18:1(n-7)	4.0
18:1(n-9)	22.2
20:1(n-7)	0.5
20:1(n-9+n-11)	2.7
22:1	0.8
24:1	0.7
Total	**36.8**
Polyunsaturates	
18:2(n-6)	1.5
18:3(n-3)	0.3
18:3(n-6)	0.3
18:4(n-3)	0.5
20:2(n-6)	0.5
20:3(n-6)	0.3
20:4(n-3)	0.9
20:4(n-6) AA	3.8
20:5(n-3) EPA	4.8
22:3(n-3)	0.1
22:4(n-6)	0.7
22:5(n-3)	2.2
22:5(n-6)	0.5
22:6(n-3) DHA	8.9
Total	**25.5**

king threadfin *Polydactylus macrochir* 37 383005



Summary

Oil	0.6 %
	mg/100g (wet)
20:4(n-6) AA	34
20:5(n-3) EPA	16
22:6(n-3) DHA	62
(n-3)/(n-6)	1.7

Oil Content

Oil Class	mg/100g (wet)
Total oil	**562**
Wax ester*	0
Triglyceride	64
Free fatty acid	14
Cholesterol	34
Polar oil	450

Fatty Acids

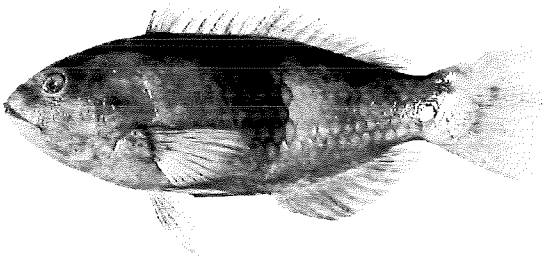
Total fatty acids	**350**
Total saturates	128
Total monounsaturates	63
Total polyunsaturates	153
Total (n-3)	96
Total (n-6)	57

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.7
15:0	0.6
16:0	19.6
17:0	1.3
18:0	12.6
20:0	0.3
22:0	0.3
24:0	0.2
Total	**37.7**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	2.7
16:1(n-9)	0.2
17:1(n-8)	0.9
18:1(n-7)	3.1
18:1(n-9)	7.3
20:1(n-7)	0.1
20:1(n-9+n-11)	0.9
22:1	0.1
24:1	0.7
Total	**16.1**
Polyunsaturates	
18:2(n-6)	2.2
18:3(n-3)	3.2
18:3(n-6)	0.3
18:4(n-3)	0.2
20:2(n-6)	0.5
20:3(n-6)	0.4
20:4(n-3)	0.3
20:4(n-6) AA	9.7
20:5(n-3) EPA	4.7
22:3(n-3)	0.0
22:4(n-6)	1.2
22:5(n-3)	2.1
22:5(n-6)	1.9
22:6(n-3) DHA	19.3
Total	**46.2**

wrasse *Notolabrus tetricus* 37 384003



Summary

Oil	0.4 %
	mg/100g (wet)
20:4(n-6) AA	22
20:5(n-3) EPA	20
22:6(n-3) DHA	56
(n-3)/(n-6)	2.3

Oil Content

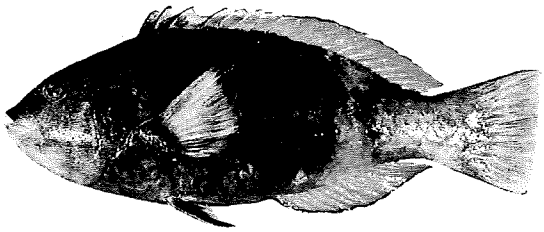
Oil Class	mg/100g (wet)
Total oil	**392**
Wax ester*	4
Triglyceride	39
Free fatty acid	143
Cholesterol	71
Polar oil	135
Fatty Acids	
Total fatty acids	**285**
Total saturates	94
Total monounsaturates	69
Total polyunsaturates	122
Total (n-3)	85
Total (n-6)	37

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.5
15:0	0.3
16:0	17.6
17:0	1.1
18:0	11.9
20:0	0.5
22:0	0.4
24:0	0.4
Total	**33.4**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	2.9
16:1(n-9)	0.2
17:1(n-8)	0.6
18:1(n-7)	3.5
18:1(n-9)	19.9
20:1(n-7)	0.2
20:1(n-9+n-11)	0.9
22:1	0.3
24:1	0.9
Total	**29.7**
Polyunsaturates	
18:2(n-6)	5.8
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.2
20:2(n-6)	0.5
20:3(n-6)	0.3
20:4(n-3)	0.2
20:4(n-6) AA	8.3
20:5(n-3) EPA	6.0
22:3(n-3)	0.0
22:4(n-6)	0.6
22:5(n-3)	1.6
22:5(n-6)	1.1
22:6(n-3) DHA	12.0
Total	**36.9**

wrasse *Notolabrus gymnogenis* 37 384041



Summary

Oil	0.6 %
	mg/100g (wet)
20:4(n-6) AA	29
20:5(n-3) EPA	35
22:6(n-3) DHA	141
(n-3)/(n-6)	3.9

Oil Content

Oil Class	mg/100g (wet)
Total oil	**623**
Wax ester*	0
Triglyceride	64
Free fatty acid	49
Cholesterol	23
Polar oil	487

Fatty Acids

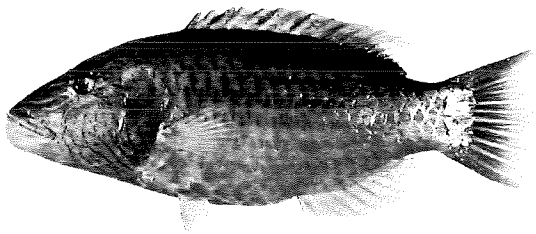
Total fatty acids	**452**
Total saturates	130
Total monounsaturates	76
Total polyunsaturates	246
Total (n-3)	196
Total (n-6)	50

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.1
15:0	0.4
16:0	17.9
17:0	0.7
18:0	7.3
20:0	0.2
22:0	0.1
24:0	0.2
Total	**28.4**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	1.7
16:1(n-9)	0.2
17:1(n-8)	0.3
18:1(n-7)	2.2
18:1(n-9)	8.5
20:1(n-7)	0.2
20:1(n-9+n-11)	1.1
22:1	0.2
24:1	1.4
Total	**15.8**
Polyunsaturates	
18:2(n-6)	1.1
18:3(n-3)	0.0
18:3(n-6)	0.3
18:4(n-3)	0.1
20:2(n-6)	0.3
20:3(n-6)	0.3
20:4(n-3)	0.3
20:4(n-6) AA	6.7
20:5(n-3) EPA	7.8
22:3(n-3)	0.4
22:4(n-6)	1.4
22:5(n-3)	3.6
22:5(n-6)	1.1
22:6(n-3) DHA	32.6
Total	**55.9**

Maori wrasse *Oxycheilinus digramma* 37 384065



Summary

Oil	0.3 %
	mg/100g (wet)
20:4(n-6) AA	24
20:5(n-3) EPA	11
22:6(n-3) DHA	93
(n-3)/(n-6)	2.5

Oil Content

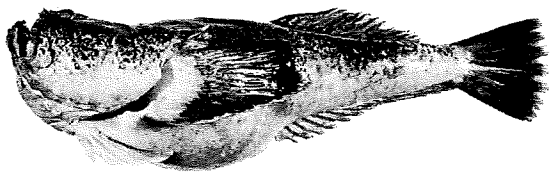
Oil Class	mg/100g (wet)
Total oil	**324**
Wax ester*	0
Triglyceride	0
Free fatty acid	100
Cholesterol	20
Polar oil	204
Fatty Acids	
Total fatty acids	**277**
Total saturates	81
Total monounsaturates	41
Total polyunsaturates	156
Total (n-3)	112
Total (n-6)	44

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.6
15:0	0.3
16:0	17.1
17:0	0.8
18:0	9.3
20:0	0.1
22:0	0.1
24:0	0.3
Total	**29.0**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	1.6
16:1(n-9)	0.1
17:1(n-8)	0.4
18:1(n-7)	1.7
18:1(n-9)	8.8
20:1(n-7)	0.1
20:1(n-9+n-11)	0.5
22:1	0.1
24:1	1.4
Total	**14.8**
Polyunsaturates	
18:2(n-6)	1.4
18:3(n-3)	0.0
18:3(n-6)	0.4
18:4(n-3)	0.2
20:2(n-6)	0.2
20:3(n-6)	0.6
20:4(n-3)	0.4
20:4(n-6) AA	8.5
20:5(n-3) EPA	3.9
22:3(n-3)	0.0
22:4(n-6)	2.0
22:5(n-3)	2.4
22:5(n-6)	2.9
22:6(n-3) DHA	33.4
Total	**56.2**

stargazer *Kathetostoma canaster* 37 400018



Summary

Oil	0.4 %
	mg/100g (wet)
20:4(n-6) AA	13
20:5(n-3) EPA	24
22:6(n-3) DHA	67
(n-3)/(n-6)	4.9

Oil Content

Oil Class	mg/100g (wet)
Total oil	**395**
Wax ester*	2
Triglyceride	2
Free fatty acid	4
Cholesterol	16
Polar oil	371

Fatty Acids

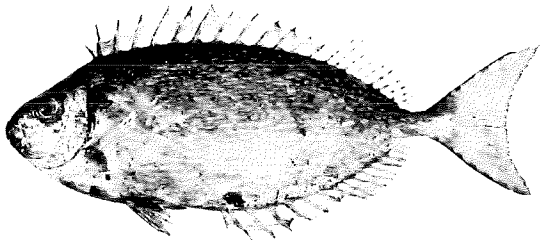
Total fatty acids	**223**
Total saturates	60
Total monounsaturates	44
Total polyunsaturates	119
Total (n-3)	99
Total (n-6)	20

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.2
15:0	0.4
16:0	16.6
17:0	0.6
18:0	8.0
20:0	0.1
22:0	0.0
24:0	0.0
Total	**27.1**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	2.2
16:1(n-9)	0.2
17:1(n-8)	0.4
18:1(n-7)	2.4
18:1(n-9)	10.8
20:1(n-7)	0.1
20:1(n-9+n-11)	1.5
22:1	0.4
24:1	1.6
Total	**19.7**
Polyunsaturates	
18:2(n-6)	1.3
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.3
20:2(n-6)	0.1
20:3(n-6)	0.1
20:4(n-3)	0.5
20:4(n-6) AA	5.8
20:5(n-3) EPA	10.6
22:3(n-3)	0.0
22:4(n-6)	0.5
22:5(n-3)	2.7
22:5(n-6)	1.0
22:6(n-3) DHA	30.2
Total	**53.2**

rabbitfish *Siganus nebulosus* 37 438001



Summary

Oil	0.6 %
	mg/100g (wet)
20:4(n-6) AA	40
20:5(n-3) EPA	5
22:6(n-3) DHA	49
(n-3)/(n-6)	0.9

Oil Content

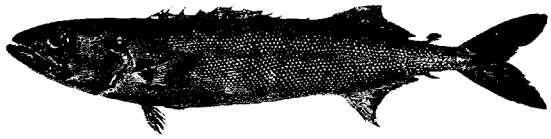
Oil Class	mg/100g (wet)
Total oil	**576**
Wax ester*	0
Triglyceride	16
Free fatty acid	46
Cholesterol	22
Polar oil	492
Fatty Acids	
Total fatty acids	**294**
Total saturates	125
Total monounsaturates	41
Total polyunsaturates	128
Total (n-3)	62
Total (n-6)	66

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.0
15:0	1.0
16:0	27.1
17:0	1.5
18:0	14.1
20:0	0.2
22:0	0.2
24:0	0.3
Total	**46.0**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	1.7
16:1(n-9)	0.1
17:1(n-8)	0.5
18:1(n-7)	2.3
18:1(n-9)	8.1
20:1(n-7)	0.2
20:1(n-9+n-11)	0.3
22:1	0.7
24:1	0.9
Total	**14.9**
Polyunsaturates	
18:2(n-6)	0.7
18:3(n-3)	0.1
18:3(n-6)	0.0
18:4(n-3)	0.3
20:2(n-6)	0.3
20:3(n-6)	0.3
20:4(n-3)	0.3
20:4(n-6) AA	12.4
20:5(n-3) EPA	1.3
22:3(n-3)	0.0
22:4(n-6)	1.6
22:5(n-3)	2.0
22:5(n-6)	5.2
22:6(n-3) DHA	14.6
Total	**39.1**

escolar *Ruvettus pretiosus* 37 439003



Summary

Oil	17.8 %
	mg/100g (wet)
20:4(n-6) AA	118
20:5(n-3) EPA	201
22:6(n-3) DHA	584
(n-3)/(n-6)	2.9

Oil Content

Oil Class	mg/100g (wet)
Total oil	**17759**
Wax ester*	17118
Triglyceride	30
Free fatty acid	89
Cholesterol	81
Polar oil	441

Fatty Acids

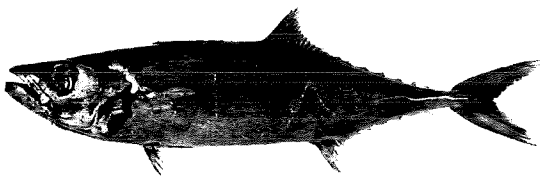
Total fatty acids	**9321**
Total saturates	489
Total monounsaturates	7461
Total polyunsaturates	1371
Total (n-3)	1019
Total (n-6)	351

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.1
15:0	0.0
16:0	2.3
17:0	0.6
18:0	2.0
20:0	0.1
22:0	0.1
24:0	0.1
Total	**5.3**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	1.6
16:1(n-9)	0.5
17:1(n-8)	0.5
18:1(n-7)	4.8
18:1(n-9)	59.5
20:1(n-7)	0.4
20:1(n-9+n-11)	10.2
22:1	1.1
24:1	0.9
Total	**79.7**
Polyunsaturates	
18:2(n-6)	0.9
18:3(n-3)	0.0
18:3(n-6)	0.0
18:4(n-3)	0.0
20:2(n-6)	0.4
20:3(n-6)	0.2
20:4(n-3)	0.8
20:4(n-6) AA	1.3
20:5(n-3) EPA	2.1
22:3(n-3)	0.0
22:4(n-6)	0.5
22:5(n-3)	1.7
22:5(n-6)	0.4
22:6(n-3) DHA	6.4
Total	**15.0**

escolar *Lepidocybium flavobrunneum* 37 439008



Summary

Oil	19.2 %
	mg/100g (wet)
20:4(n-6) AA	130
20:5(n-3) EPA	165
22:6(n-3) DHA	434
(n-3)/(n-6)	1.9

Oil Content

Oil Class	mg/100g (wet)
Total oil	**19195**
Wax ester*	18642
Triglyceride	0
Free fatty acid	71
Cholesterol	44
Polar oil	438

Fatty Acids

Total fatty acids	**10269**
Total saturates	369
Total monounsaturates	8804
Total polyunsaturates	1095
Total (n-3)	717
Total (n-6)	378

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.1
15:0	0.0
16:0	1.6
17:0	0.5
18:0	1.0
20:0	0.0
22:0	0.1
24:0	0.1
Total	**3.6**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	2.6
16:1(n-9)	0.2
17:1(n-8)	0.7
18:1(n-7)	4.7
18:1(n-9)	70.3
20:1(n-7)	0.2
20:1(n-9+n-11)	6.1
22:1	0.4
24:1	0.5
Total	**85.8**
Polyunsaturates	
18:2(n-6)	1.3
18:3(n-3)	0.0
18:3(n-6)	0.0
18:4(n-3)	0.0
20:2(n-6)	0.2
20:3(n-6)	0.2
20:4(n-3)	0.4
20:4(n-6) AA	1.3
20:5(n-3) EPA	1.6
22:3(n-3)	0.0
22:4(n-6)	0.2
22:5(n-3)	0.7
22:5(n-6)	0.5
22:6(n-3) DHA	4.2
Total	**10.6**

ribbonfish *Lepidopus caudatus*

37 440002

Summary

Oil	0.7 %
	mg/100g (wet)
20:4(n-6) AA	16
20:5(n-3) EPA	17
22:6(n-3) DHA	167
(n-3)/(n-6)	6.9

Oil Content

Oil Class	mg/100g (wet)
Total oil	**738**
Wax ester*	0
Triglyceride	24
Free fatty acid	12
Cholesterol	33
Polar oil	669

Fatty Acids

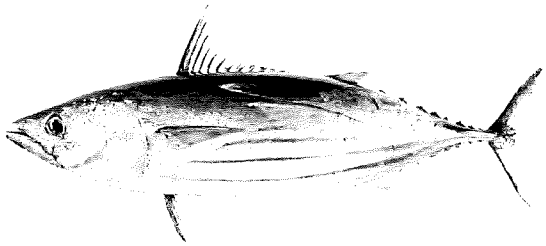
Total fatty acids	**418**
Total saturates	120
Total monounsaturates	76
Total polyunsaturates	222
Total (n-3)	194
Total (n-6)	28

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.4
15:0	0.2
16:0	18.0
17:0	0.5
18:0	9.2
20:0	0.1
22:0	0.1
24:0	0.1
Total	**28.7**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	0.8
16:1(n-9)	0.1
17:1(n-8)	0.3
18:1(n-7)	2.0
18:1(n-9)	10.7
20:1(n-7)	0.1
20:1(n-9+n-11)	1.3
22:1	0.6
24:1	1.6
Total	**17.7**
Polyunsaturates	
18:2(n-6)	0.7
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.2
20:2(n-6)	0.2
20:3(n-6)	0.2
20:4(n-3)	0.5
20:4(n-6) AA	3.9
20:5(n-3) EPA	4.1
22:3(n-3)	0.0
22:4(n-6)	0.3
22:5(n-3)	1.6
22:5(n-6)	1.5
22:6(n-3) DHA	40.4
Total	**53.6**

skipjack tuna *Katsuwonus pelamis* 37 441003



Summary

Oil	0.4 %
	mg/100g (wet)
20:4(n-6) AA	15
20:5(n-3) EPA	13
22:6(n-3) DHA	96
(n-3)/(n-6)	4.0

Oil Content

Oil Class	mg/100g (wet)
Total oil	**410**
Wax ester*	0
Triglyceride	4
Free fatty acid	49
Cholesterol	18
Polar oil	339
Fatty Acids	
Total fatty acids	**286**
Total saturates	104
Total monounsaturates	41
Total polyunsaturates	140
Total (n-3)	112
Total (n-6)	28

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.2
15:0	0.3
16:0	22.3
17:0	1.0
18:0	12.2
20:0	0.1
22:0	0.2
24:0	0.3
Total	**36.7**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	0.9
16:1(n-9)	0.0
17:1(n-8)	0.4
18:1(n-7)	1.7
18:1(n-9)	8.0
20:1(n-7)	0.0
20:1(n-9+n-11)	0.4
22:1	0.3
24:1	2.3
Total	**14.1**
Polyunsaturates	
18:2(n-6)	0.7
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.1
20:2(n-6)	0.2
20:3(n-6)	0.1
20:4(n-3)	0.1
20:4(n-6) AA	5.1
20:5(n-3) EPA	4.7
22:3(n-3)	0.0
22:4(n-6)	0.3
22:5(n-3)	0.7
22:5(n-6)	3.0
22:6(n-3) DHA	34.0
Total	**49.2**

slender tuna *Allothunnus fallai* 37 441021

Summary

Oil	16.5 %
	mg/100g (wet)
20:4(n-6) AA	95
20:5(n-3) EPA	965
22:6(n-3) DHA	2199
(n-3)/(n-6)	9.0

Oil Content

Oil Class	mg/100g (wet)
Total oil	**16527**
Wax ester*	88
Triglyceride	15583
Free fatty acid	90
Cholesterol	59
Polar oil	707

Fatty Acids

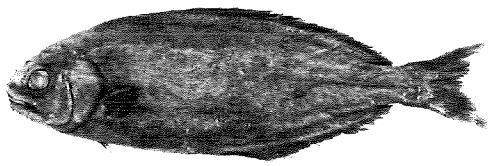
Total fatty acids	**13248**
Total saturates	2753
Total monounsaturates	6316
Total polyunsaturates	4179
Total (n-3)	3759
Total (n-6)	418

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	5.8
15:0	0.6
16:0	10.8
17:0	0.4
18:0	2.6
20:0	0.1
22:0	0.0
24:0	0.0
Total	**20.8**
Monounsaturates	
16:1(n-5)	0.3
16:1(n-7)	3.1
16:1(n-9)	0.2
17:1(n-8)	0.4
18:1(n-7)	3.0
18:1(n-9)	9.5
20:1(n-7)	0.4
20:1(n-9+n-11)	21.1
22:1	8.5
24:1	0.7
Total	**47.9**
Polyunsaturates	
18:2(n-6)	1.5
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.3
20:2(n-6)	0.4
20:3(n-6)	0.1
20:4(n-3)	2.8
20:4(n-6) AA	0.7
20:5(n-3) EPA	7.2
22:3(n-3)	0.0
22:4(n-6)	0.1
22:5(n-3)	1.4
22:5(n-6)	0.3
22:6(n-3) DHA	16.4
Total	**31.3**

rudderfish *Tubbia tasmanica* 37 445002



Summary

Oil	**15.7 %**
	mg/100g (wet)
20:4(n-6) AA	50
20:5(n-3) EPA	49
22:6(n-3) DHA	167
(n-3)/(n-6)	1.2

Oil Content

Oil Class	mg/100g (wet)
Total oil	**15742**
Diacylglyceryl ether*	13501
Triglyceride	1490
Free fatty acid	162
Cholesterol	24
Polar oil	564
Fatty Acids	
Total fatty acids	**7587**
Total saturates	1995
Total monounsaturates	5103
Total polyunsaturates	489
Total (n-3)	269
Total (n-6)	221

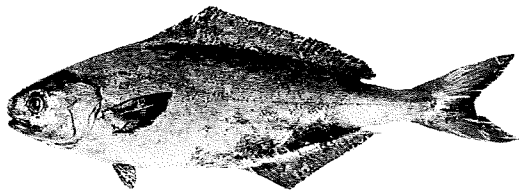
*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.4
15:0	0.8
16:0	13.6
17:0	0.8
18:0	7.0
20:0	0.3
22:0	0.2
24:0	0.0
Total	**25.8**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	2.6
16:1(n-9)	0.5
17:1(n-8)	0.8
18:1(n-7)	5.1
18:1(n-9)	49.6
20:1(n-7)	0.6
20:1(n-9+n-11)	5.7
22:1	1.7
24:1	0.7
Total	**67.6**
Polyunsaturates	
18:2(n-6)	1.7
18:3(n-3)	0.0
18:3(n-6)	0.5
18:4(n-3)	0.2
20:2(n-6)	0.1
20:3(n-6)	0.0
20:4(n-3)	0.2
20:4(n-6) AA	0.7
20:5(n-3) EPA	0.7
22:3(n-3)	0.0
22:4(n-6)	0.1
22:5(n-3)	0.3
22:5(n-6)	0.0
22:6(n-3) DHA	2.3
Total	**6.6**

rudderfish *Centrolophus niger*

37 445004



Summary

Oil	14.4 %
	mg/100g (wet)
20:4(n-6) AA	66
20:5(n-3) EPA	70
22:6(n-3) DHA	236
(n-3)/(n-6)	1.6

Oil Content

Oil Class	mg/100g (wet)
Total oil	**14394**
Diacylglyceryl ether*	12891
Triglyceride	1090
Free fatty acid	122
Cholesterol	59
Polar oil	190

Fatty Acids

Total fatty acids	**8061**
Total saturates	2808
Total monounsaturates	4572
Total polyunsaturates	682
Total (n-3)	415
Total (n-6)	267

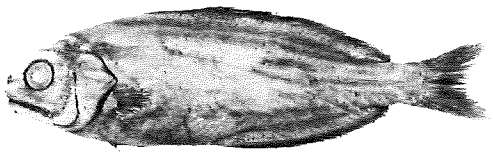
*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.4
15:0	0.9
16:0	23.1
17:0	0.8
18:0	5.5
20:0	0.9
22:0	0.4
24:0	0.1
Total	**34.8**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	4.9
16:1(n-9)	0.7
17:1(n-8)	0.8
18:1(n-7)	3.0
18:1(n-9)	40.2
20:1(n-7)	0.8
20:1(n-9+n-11)	6.0
22:1	0.0
24:1	0.1
Total	**56.7**
Polyunsaturates	
18:2(n-6)	1.9
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.4
20:2(n-6)	0.1
20:3(n-6)	0.1
20:4(n-3)	0.5
20:4(n-6) AA	0.8
20:5(n-3) EPA	0.8
22:3(n-3)	0.0
22:4(n-6)	0.2
22:5(n-3)	0.4
22:5(n-6)	0.2
22:6(n-3) DHA	2.9
Total	**8.4**

rudderfish *Tubbia* sp.

37 445903



Summary

Oil	13.3 %
	mg/100g (wet)
20:4(n-6) AA	26
20:5(n-3) EPA	29
22:6(n-3) DHA	148
(n-3)/(n-6)	3.4

Oil Content

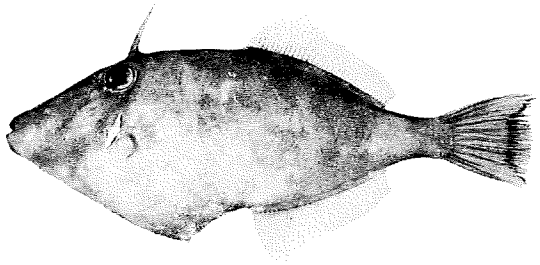
Oil Class	mg/100g (wet)
Total oil	**13269**
Hydrocarbon*	12002
Triglyceride	716
Free fatty acid	86
Cholesterol	19
Polar oil	447
Fatty Acids	
Total fatty acids	**1694**
Total saturates	485
Total monounsaturates	937
Total polyunsaturates	272
Total (n-3)	210
Total (n-6)	61

*includes diacyglyceryl ether and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.0
15:0	0.9
16:0	15.1
17:0	0.7
18:0	7.7
20:0	0.5
22:0	0.3
24:0	0.1
Total	**28.1**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	1.9
16:1(n-9)	0.9
17:1(n-8)	0.6
18:1(n-7)	3.9
18:1(n-9)	34.9
20:1(n-7)	0.8
20:1(n-9+n-11)	8.5
22:1	1.5
24:1	0.6
Total	**53.8**
Polyunsaturates	
18:2(n-6)	1.5
18:3(n-3)	0.0
18:3(n-6)	0.3
18:4(n-3)	0.2
20:2(n-6)	0.1
20:3(n-6)	0.0
20:4(n-3)	0.3
20:4(n-6) AA	1.8
20:5(n-3) EPA	2.4
22:3(n-3)	0.0
22:4(n-6)	0.2
22:5(n-3)	0.9
22:5(n-6)	0.1
22:6(n-3) DHA	10.3
Total	**18.1**

velvet leatherjacket *Meuschenia scaber* 37 465005



Summary

Oil	0.6 %
	mg/100g (wet)
20:4(n-6) AA	53
20:5(n-3) EPA	31
22:6(n-3) DHA	118
(n-3)/(n-6)	2.3

Oil Content

Oil Class	mg/100g (wet)
Total oil	**590**
Wax ester*	0
Triglyceride	0
Free fatty acid	8
Cholesterol	18
Polar oil	564

Fatty Acids

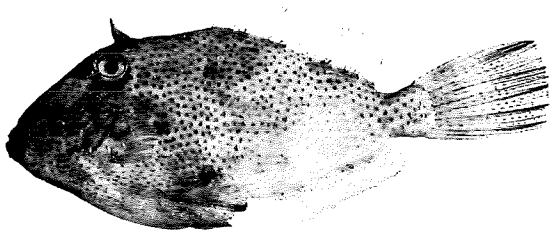
Total fatty acids	**389**
Total saturates	118
Total monounsaturates	41
Total polyunsaturates	231
Total (n-3)	161
Total (n-6)	70

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.3
15:0	0.6
16:0	19.3
17:0	1.1
18:0	8.3
20:0	0.1
22:0	0.0
24:0	0.1
Total	**30.3**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	0.8
16:1(n-9)	0.0
17:1(n-8)	0.4
18:1(n-7)	2.7
18:1(n-9)	4.9
20:1(n-7)	0.2
20:1(n-9+n-11)	0.3
22:1	0.5
24:1	0.4
Total	**10.4**
Polyunsaturates	
18:2(n-6)	0.6
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.4
20:2(n-6)	0.2
20:3(n-6)	0.1
20:4(n-3)	0.2
20:4(n-6) AA	13.2
20:5(n-3) EPA	7.8
22:3(n-3)	0.2
22:4(n-6)	0.7
22:5(n-3)	2.5
22:5(n-6)	2.5
22:6(n-3) DHA	30.7
Total	**59.3**

leatherjacket *Pseudomonacanthus peroni* 37 465020



Summary

Oil	0.5 %
	mg/100g (wet)
20:4(n-6) AA	44
20:5(n-3) EPA	17
22:6(n-3) DHA	80
(n-3)/(n-6)	1.5

Oil Content

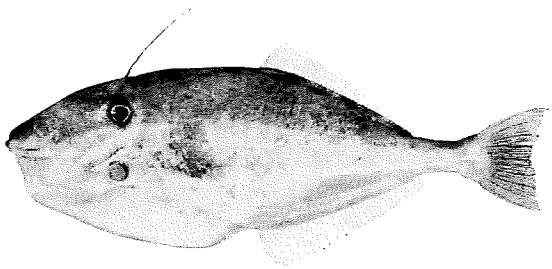
Oil Class	mg/100g (wet)
Total oil	**533**
Wax ester*	0
Triglyceride	1
Free fatty acid	9
Cholesterol	16
Polar oil	508
Fatty Acids	
Total fatty acids	**281**
Total saturates	79
Total monounsaturates	33
Total polyunsaturates	169
Total (n-3)	103
Total (n-6)	67

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.3
15:0	0.4
16:0	14.7
17:0	1.6
18:0	10.4
20:0	0.2
22:0	0.1
24:0	0.1
Total	**28.2**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	0.6
16:1(n-9)	0.0
17:1(n-8)	0.4
18:1(n-7)	2.6
18:1(n-9)	6.6
20:1(n-7)	0.1
20:1(n-9+n-11)	0.6
22:1	0.3
24:1	0.2
Total	**11.6**
Polyunsaturates	
18:2(n-6)	0.3
18:3(n-3)	0.0
18:3(n-6)	0.4
18:4(n-3)	0.3
20:2(n-6)	0.3
20:3(n-6)	0.2
20:4(n-3)	0.1
20:4(n-6) AA	15.5
20:5(n-3) EPA	6.1
22:3(n-3)	0.0
22:4(n-6)	1.4
22:5(n-3)	1.7
22:5(n-6)	5.6
22:6(n-3) DHA	28.3
Total	**60.2**

leatherjacket *Aluterus monoceros* 37 465022



Summary

Oil	0.6 %
	mg/100g (wet)
20:4(n-6) AA	50
20:5(n-3) EPA	12
22:6(n-3) DHA	68
(n-3)/(n-6)	1.1

Oil Content

Oil Class	mg/100g (wet)
Total oil	**620**
Wax ester*	0
Triglyceride	2
Free fatty acid	6
Cholesterol	19
Polar oil	593

Fatty Acids

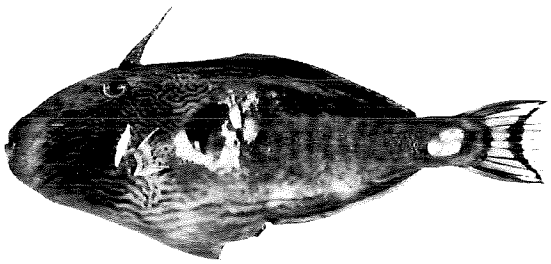
Total fatty acids	**313**
Total saturates	95
Total monounsaturates	43
Total polyunsaturates	175
Total (n-3)	92
Total (n-6)	83

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.3
15:0	0.7
16:0	15.7
17:0	1.7
18:0	11.0
20:0	0.3
22:0	0.1
24:0	0.1
Total	**30.3**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	1.2
16:1(n-9)	0.7
17:1(n-8)	0.4
18:1(n-7)	2.4
18:1(n-9)	7.4
20:1(n-7)	0.3
20:1(n-9+n-11)	0.6
22:1	0.4
24:1	0.3
Total	**13.7**
Polyunsaturates	
18:2(n-6)	0.6
18:3(n-3)	0.0
18:3(n-6)	0.4
18:4(n-3)	0.2
20:2(n-6)	0.5
20:3(n-6)	0.2
20:4(n-3)	0.2
20:4(n-6) AA	15.9
20:5(n-3) EPA	3.9
22:3(n-3)	0.0
22:4(n-6)	4.4
22:5(n-3)	3.1
22:5(n-6)	4.7
22:6(n-3) DHA	21.8
Total	**56.0**

reef leatherjacket *Meuschenia freycineti* 37 465036



Summary

Oil	0.5 %
	mg/100g (wet)
20:4(n-6) AA	44
20:5(n-3) EPA	49
22:6(n-3) DHA	64
(n-3)/(n-6)	2.4

Oil Content

Oil Class	mg/100g (wet)
Total oil	**527**
Wax ester*	0
Triglyceride	1
Free fatty acid	11
Cholesterol	22
Polar oil	493
Fatty Acids	
Total fatty acids	**321**
Total saturates	88
Total monounsaturates	46
Total polyunsaturates	187
Total (n-3)	131
Total (n-6)	56

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.4
15:0	0.4
16:0	18.0
17:0	0.7
18:0	7.3
20:0	0.1
22:0	0.0
24:0	0.0
Total	**27.5**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	1.8
16:1(n-9)	0.1
17:1(n-8)	0.7
18:1(n-7)	2.4
18:1(n-9)	7.3
20:1(n-7)	0.2
20:1(n-9+n-11)	0.6
22:1	0.5
24:1	0.5
Total	**14.2**
Polyunsaturates	
18:2(n-6)	0.6
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.2
20:2(n-6)	0.2
20:3(n-6)	0.1
20:4(n-3)	0.2
20:4(n-6) AA	13.6
20:5(n-3) EPA	15.5
22:3(n-3)	0.1
22:4(n-6)	1.4
22:5(n-3)	5.0
22:5(n-6)	1.3
22:6(n-3) DHA	19.9
Total	**58.2**

school prawn *Metapenaeus macleayi* 28 711029

Summary

Oil	0.9 %
	mg/100g (wet)
20:4(n-6) AA	57
20:5(n-3) EPA	59
22:6(n-3) DHA	45
(n-3)/(n-6)	1.1

Oil Content

Oil Class	mg/100g (wet)
Total oil	**897**
Wax ester*	0
Triglyceride	0
Free fatty acid	5
Cholesterol	85
Polar oil	807

Fatty Acids

Total fatty acids	**508**
Total saturates	175
Total monounsaturates	109
Total polyunsaturates	224
Total (n-3)	115
Total (n-6)	108

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.6
15:0	1.1
16:0	15.5
17:0	2.9
18:0	9.2
20:0	0.6
22:0	0.7
24:0	0.7
Total	**34.5**
Monounsaturates	
16:1(n-5)	0.3
16:1(n-7)	4.7
16:1(n-9)	0.1
17:1(n-8)	2.3
18:1(n-7)	3.7
18:1(n-9)	7.8
20:1(n-7)	0.3
20:1(n-9+n-11)	1.4
22:1	0.4
24:1	0.3
Total	**21.5**
Polyunsaturates	
18:2(n-6)	4.6
18:3(n-3)	0.0
18:3(n-6)	0.8
18:4(n-3)	0.2
20:2(n-6)	0.7
20:3(n-6)	0.4
20:4(n-3)	0.5
20:4(n-6) AA	11.3
20:5(n-3) EPA	11.7
22:3(n-3)	0.0
22:4(n-6)	0.6
22:5(n-3)	1.4
22:5(n-6)	2.9
22:6(n-3) DHA	8.9
Total	**44.0**

royal red prawn *Haliporoides sibogae* 28 714005

Summary

Oil	1.0 %
	mg/100g (wet)
20:4(n-6) AA	35
20:5(n-3) EPA	97
22:6(n-3) DHA	116
(n-3)/(n-6)	3.5

Oil Content

Oil Class	mg/100g (wet)
Total oil	**1009**
Wax ester*	0
Triglyceride	0
Free fatty acid	6
Cholesterol	119
Polar oil	884
Fatty Acids	
Total fatty acids	**595**
Total saturates	151
Total monounsaturates	149
Total polyunsaturates	295
Total (n-3)	230
Total (n-6)	65

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.7
15:0	0.9
16:0	13.3
17:0	1.6
18:0	5.4
20:0	0.4
22:0	0.3
24:0	1.1
Total	**25.3**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	3.2
16:1(n-9)	0.2
17:1(n-8)	1.3
18:1(n-7)	5.0
18:1(n-9)	11.1
20:1(n-7)	0.9
20:1(n-9+n-11)	1.4
22:1	1.0
24:1	0.3
Total	**25.0**
Polyunsaturates	
18:2(n-6)	1.0
18:3(n-3)	0.0
18:3(n-6)	0.1
18:4(n-3)	0.6
20:2(n-6)	1.8
20:3(n-6)	0.2
20:4(n-3)	0.4
20:4(n-6) AA	5.9
20:5(n-3) EPA	16.4
22:3(n-3)	0.1
22:4(n-6)	0.6
22:5(n-3)	1.8
22:5(n-6)	1.3
22:6(n-3) DHA	19.5
Total	**49.7**

freshwater prawn *Macrobrachium rosenbergii* 28 756002

Summary

Oil	1.3 %
	mg/100g (wet)
20:4(n-6) AA	35
20:5(n-3) EPA	45
22:6(n-3) DHA	9
(n-3)/(n-6)	0.4

Oil Content

Oil Class	mg/100g (wet)
Total oil	**1278**
Wax ester*	0
Triglyceride	0
Free fatty acid	21
Cholesterol	86
Polar oil	1171

Fatty Acids

Total fatty acids	**721**
Total saturates	257
Total monounsaturates	256
Total polyunsaturates	209
Total (n-3)	60
Total (n-6)	149

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.7
15:0	0.3
16:0	19.9
17:0	0.9
18:0	12.3
20:0	0.5
22:0	0.3
24:0	0.1
Total	**35.6**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	4.1
16:1(n-9)	0.1
17:1(n-8)	0.6
18:1(n-7)	4.5
18:1(n-9)	25.0
20:1(n-7)	0.0
20:1(n-9+n-11)	0.7
22:1	0.1
24:1	0.1
Total	**35.4**
Polyunsaturates	
18:2(n-6)	14.2
18:3(n-3)	0.0
18:3(n-6)	0.3
18:4(n-3)	0.0
20:2(n-6)	0.5
20:3(n-6)	0.2
20:4(n-3)	0.1
20:4(n-6) AA	4.8
20:5(n-3) EPA	6.2
22:3(n-3)	0.0
22:4(n-6)	0.3
22:5(n-3)	0.7
22:5(n-6)	0.4
22:6(n-3) DHA	1.2
Total	**29.0**

scampi *Metanephrops boschmai* 28 786002

Summary

Oil	0.7 %
	mg/100g (wet)
20:4(n-6) AA	19
20:5(n-3) EPA	49
22:6(n-3) DHA	68
(n-3)/(n-6)	4.1

Oil Content

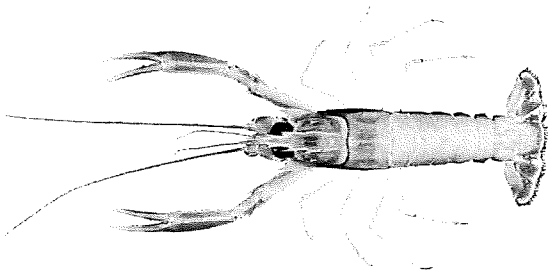
Oil Class	mg/100g (wet)
Total oil	**667**
Wax ester*	0
Triglyceride	0
Free fatty acid	4
Cholesterol	66
Polar oil	597
Fatty Acids	
Total fatty acids	**332**
Total saturates	83
Total monounsaturates	99
Total polyunsaturates	150
Total (n-3)	120
Total (n-6)	29

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.4
15:0	0.5
16:0	14.3
17:0	1.0
18:0	7.4
20:0	0.7
22:0	0.5
24:0	0.0
Total	**25.2**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	3.6
16:1(n-9)	0.1
17:1(n-8)	0.9
18:1(n-7)	3.3
18:1(n-9)	19.4
20:1(n-7)	0.1
20:1(n-9+n-11)	0.9
22:1	1.0
24:1	0.2
Total	**29.5**
Polyunsaturates	
18:2(n-6)	1.3
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.4
20:2(n-6)	0.6
20:3(n-6)	0.1
20:4(n-3)	0.2
20:4(n-6) AA	5.7
20:5(n-3) EPA	14.9
22:3(n-3)	0.0
22:4(n-6)	0.1
22:5(n-3)	0.6
22:5(n-6)	1.0
22:6(n-3) DHA	20.3
Total	**45.3**

scampi *Metanephrops velutinus* 28 786005



Summary

Oil	0.7 %
	mg/100g (wet)
20:4(n-6) AA	20
20:5(n-3) EPA	48
22:6(n-3) DHA	78
(n-3)/(n-6)	4.0

Oil Content

Oil Class	mg/100g (wet)
Total oil	**654**
Wax ester*	0
Triglyceride	0
Free fatty acid	9
Cholesterol	58
Polar oil	586

Fatty Acids

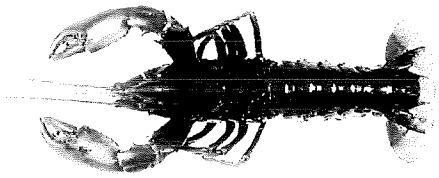
Total fatty acids	**328**
Total saturates	75
Total monounsaturates	89
Total polyunsaturates	164
Total (n-3)	131
Total (n-6)	33

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.6
15:0	0.6
16:0	12.4
17:0	1.2
18:0	6.8
20:0	0.6
22:0	0.4
24:0	0.0
Total	**22.9**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	2.8
16:1(n-9)	0.1
17:1(n-8)	0.9
18:1(n-7)	3.3
18:1(n-9)	17.4
20:1(n-7)	0.1
20:1(n-9+n-11)	1.1
22:1	1.0
24:1	0.3
Total	**27.2**
Polyunsaturates	
18:2(n-6)	1.2
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.5
20:2(n-6)	0.7
20:3(n-6)	0.1
20:4(n-3)	0.2
20:4(n-6) AA	6.2
20:5(n-3) EPA	14.8
22:3(n-3)	0.0
22:4(n-6)	0.2
22:5(n-3)	0.7
22:5(n-6)	1.4
22:6(n-3) DHA	23.7
Total	**49.9**

marron *Cherax tenuimanus* 28 795007



Summary

Oil	0.7 %
	mg/100g (wet)
20:4(n-6) AA	36
20:5(n-3) EPA	56
22:6(n-3) DHA	18
(n-3)/(n-6)	0.7

Oil Content

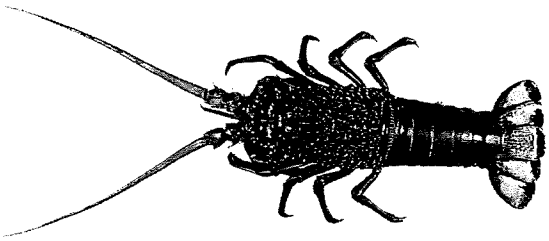
Oil Class	mg/100g (wet)
Total oil	**726**
Wax ester*	0
Triglyceride	0
Free fatty acid	3
Cholesterol	46
Polar oil	677
Fatty Acids	
Total fatty acids	**453**
Total saturates	111
Total monounsaturates	154
Total polyunsaturates	188
Total (n-3)	75
Total (n-6)	113

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.3
15:0	0.2
16:0	13.0
17:0	0.5
18:0	8.3
20:0	1.3
22:0	0.7
24:0	0.0
Total	**24.5**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	2.8
16:1(n-9)	0.2
17:1(n-8)	0.6
18:1(n-7)	2.4
18:1(n-9)	27.1
20:1(n-7)	0.0
20:1(n-9+n-11)	0.7
22:1	0.0
24:1	0.0
Total	**33.9**
Polyunsaturates	
18:2(n-6)	14.6
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.1
20:2(n-6)	1.6
20:3(n-6)	0.3
20:4(n-3)	0.1
20:4(n-6) AA	8.0
20:5(n-3) EPA	12.3
22:3(n-3)	0.0
22:4(n-6)	0.0
22:5(n-3)	0.1
22:5(n-6)	0.3
22:6(n-3) DHA	4.0
Total	**41.6**

eastern rocklobster *Jasus verreauxi* 28 820002



Summary

Oil	0.8 %
	mg/100g (wet)
20:4(n-6) AA	53
20:5(n-3) EPA	82
22:6(n-3) DHA	54
(n-3)/(n-6)	2.0

Oil Content

Oil Class	mg/100g (wet)
Total oil	**805**
Wax ester*	0
Triglyceride	0
Free fatty acid	2
Cholesterol	25
Polar oil	778

Fatty Acids

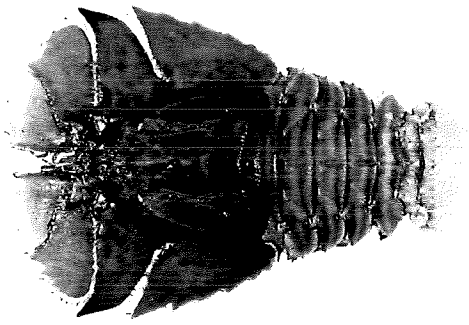
Total fatty acids	**503**
Total saturates	132
Total monounsaturates	146
Total polyunsaturates	224
Total (n-3)	148
Total (n-6)	76

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.7
15:0	1.0
16:0	12.0
17:0	1.3
18:0	8.0
20:0	1.1
22:0	0.6
24:0	0.0
Total	**26.3**
Monounsaturates	
16:1(n-5)	0.3
16:1(n-7)	5.7
16:1(n-9)	0.1
17:1(n-8)	1.4
18:1(n-7)	3.7
18:1(n-9)	14.6
20:1(n-7)	0.3
20:1(n-9+n-11)	2.3
22:1	0.2
24:1	0.0
Total	**29.1**
Polyunsaturates	
18:2(n-6)	1.4
18:3(n-3)	0.0
18:3(n-6)	0.5
18:4(n-3)	0.2
20:2(n-6)	0.5
20:3(n-6)	1.0
20:4(n-3)	0.4
20:4(n-6) AA	10.5
20:5(n-3) EPA	16.3
22:3(n-3)	0.0
22:4(n-6)	0.6
22:5(n-3)	1.8
22:5(n-6)	0.5
22:6(n-3) DHA	10.7
Total	**44.6**

Balmain bug *Ibacus peronii* 28 821004



Summary

Oil	0.7 %
	mg/100g (wet)
20:4(n-6) AA	29
20:5(n-3) EPA	49
22:6(n-3) DHA	44
(n-3)/(n-6)	2.1

Oil Content

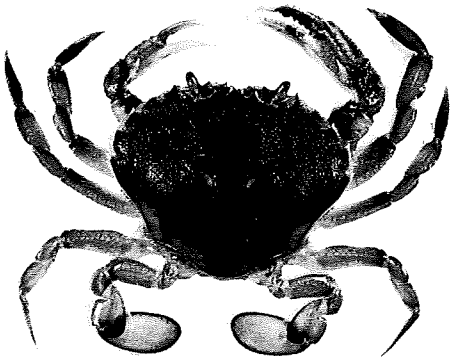
Oil Class	mg/100g (wet)
Total oil	**651**
Wax ester*	0
Triglyceride	0
Free fatty acid	14
Cholesterol	44
Polar oil	592
Fatty Acids	
Total fatty acids	**326**
Total saturates	90
Total monounsaturates	90
Total polyunsaturates	146
Total (n-3)	99
Total (n-6)	47

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.2
15:0	1.0
16:0	11.7
17:0	1.3
18:0	9.3
20:0	1.9
22:0	0.3
24:0	0.1
Total	**27.5**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	5.5
16:1(n-9)	0.1
17:1(n-8)	1.1
18:1(n-7)	3.4
18:1(n-9)	14.9
20:1(n-7)	0.6
20:1(n-9+n-11)	1.1
22:1	0.3
24:1	0.0
Total	**27.6**
Polyunsaturates	
18:2(n-6)	1.9
18:3(n-3)	0.0
18:3(n-6)	0.4
18:4(n-3)	0.5
20:2(n-6)	1.3
20:3(n-6)	0.5
20:4(n-3)	0.3
20:4(n-6) AA	9.2
20:5(n-3) EPA	14.9
22:3(n-3)	0.1
22:4(n-6)	0.6
22:5(n-3)	0.9
22:5(n-6)	0.7
22:6(n-3) DHA	13.6
Total	**44.8**

sand crab *Ovalipes australiensis* 28 911003



Summary

Oil	0.8 %
	mg/100g (wet)
20:4(n-6) AA	44
20:5(n-3) EPA	126
22:6(n-3) DHA	94
(n-3)/(n-6)	3.3

Oil Content

Oil Class	mg/100g (wet)
Total oil	**843**
Wax ester*	0
Triglyceride	0
Free fatty acid	14
Cholesterol	30
Polar oil	799

Fatty Acids

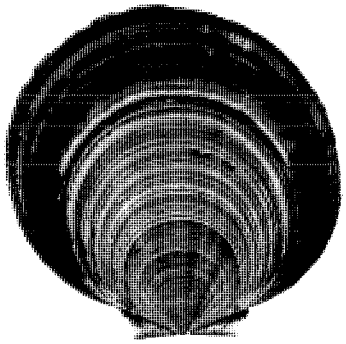
Total fatty acids	**568**
Total saturates	143
Total monounsaturates	123
Total polyunsaturates	302
Total (n-3)	231
Total (n-6)	71

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.1
15:0	0.5
16:0	12.9
17:0	1.7
18:0	8.1
20:0	0.4
22:0	0.3
24:0	0.2
Total	**25.2**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	3.4
16:1(n-9)	0.1
17:1(n-8)	1.6
18:1(n-7)	4.0
18:1(n-9)	11.1
20:1(n-7)	0.3
20:1(n-9+n-11)	0.6
22:1	0.3
24:1	0.0
Total	**21.7**
Polyunsaturates	
18:2(n-6)	2.2
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.2
20:2(n-6)	1.0
20:3(n-6)	0.2
20:4(n-3)	0.2
20:4(n-6) AA	7.7
20:5(n-3) EPA	22.2
22:3(n-3)	0.0
22:4(n-6)	0.5
22:5(n-3)	1.5
22:5(n-6)	0.6
22:6(n-3) DHA	16.4
Total	**53.1**

scallop *Amusium balloti* 23 270001



Summary

Oil	0.7 %
	mg/100g (wet)
20:4(n-6) AA	33
20:5(n-3) EPA	43
22:6(n-3) DHA	151
(n-3)/(n-6)	3.1

Oil Content

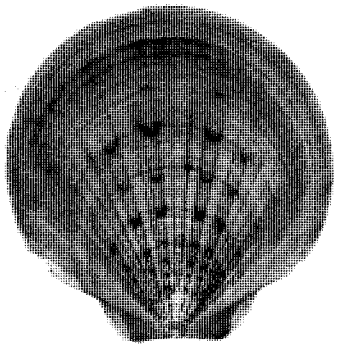
Oil Class	mg/100g (wet)
Total oil	**712**
Wax ester*	0
Triglyceride	0
Free fatty acid	6
Cholesterol	90
Polar oil	617
Fatty Acids	
Total fatty acids	**476**
Total saturates	160
Total monounsaturates	49
Total polyunsaturates	267
Total (n-3)	201
Total (n-6)	66

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.6
15:0	0.3
16:0	18.5
17:0	3.0
18:0	10.0
20:0	0.1
22:0	0.1
24:0	0.5
Total	**33.7**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	1.2
16:1(n-9)	0.1
17:1(n-8)	0.1
18:1(n-7)	3.6
18:1(n-9)	2.9
20:1(n-7)	0.1
20:1(n-9+n-11)	1.8
22:1	0.1
24:1	0.1
Total	**10.3**
Polyunsaturates	
18:2(n-6)	1.0
18:3(n-3)	0.0
18:3(n-6)	0.5
18:4(n-3)	0.4
20:2(n-6)	0.4
20:3(n-6)	0.5
20:4(n-3)	0.2
20:4(n-6) AA	6.9
20:5(n-3) EPA	9.1
22:3(n-3)	0.0
22:4(n-6)	0.8
22:5(n-3)	0.9
22:5(n-6)	3.7
22:6(n-3) DHA	31.6
Total	**56.0**

scallop *Amusium pleuronectes* 23 270003



Summary

Oil	1.4 %
	mg/100g (wet)
20:4(n-6) AA	50
20:5(n-3) EPA	103
22:6(n-3) DHA	148
(n-3)/(n-6)	2.6

Oil Content

Oil Class	mg/100g (wet)
Total oil	**1368**
Wax ester*	7
Triglyceride	242
Free fatty acid	53
Cholesterol	119
Polar oil	946

Fatty Acids

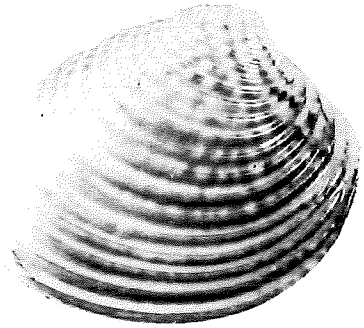
Total fatty acids	**815**
Total saturates	277
Total monounsaturates	144
Total polyunsaturates	393
Total (n-3)	281
Total (n-6)	108

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.1
15:0	0.4
16:0	19.9
17:0	2.1
18:0	8.5
20:0	0.3
22:0	0.2
24:0	0.3
Total	**34.3**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	5.5
16:1(n-9)	0.1
17:1(n-8)	0.1
18:1(n-7)	6.0
18:1(n-9)	3.4
20:1(n-7)	0.5
20:1(n-9+n-11)	1.2
22:1	0.2
24:1	0.1
Total	**17.6**
Polyunsaturates	
18:2(n-6)	1.9
18:3(n-3)	0.0
18:3(n-6)	0.4
18:4(n-3)	2.3
20:2(n-6)	0.5
20:3(n-6)	0.5
20:4(n-3)	0.4
20:4(n-6) AA	6.1
20:5(n-3) EPA	12.5
22:3(n-3)	0.0
22:4(n-6)	0.6
22:5(n-3)	1.0
22:5(n-6)	3.2
22:6(n-3) DHA	18.1
Total	**48.1**

cockle *Katelysia scalarina* 23 380004



Summary

Oil	1.0 %
	mg/100g (wet)
20:4(n-6) AA	31
20:5(n-3) EPA	77
22:6(n-3) DHA	78
(n-3)/(n-6)	3.0

Oil Content

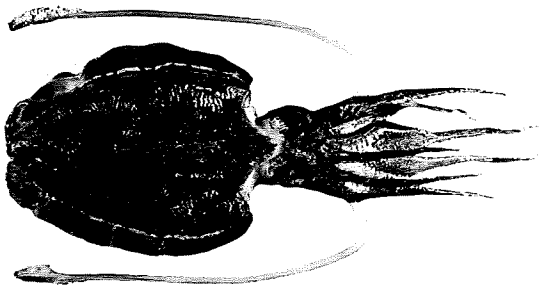
Oil Class	mg/100g (wet)
Total oil	**984**
Wax ester*	0
Triglyceride	56
Free fatty acid	66
Cholesterol	59
Polar oil	802
Fatty Acids	
Total fatty acids	**664**
Total saturates	254
Total monounsaturates	151
Total polyunsaturates	260
Total (n-3)	195
Total (n-6)	65

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.3
15:0	0.6
16:0	20.6
17:0	1.6
18:0	7.9
20:0	0.1
22:0	0.0
24:0	0.0
Total	**38.0**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	4.7
16:1(n-9)	0.1
17:1(n-8)	1.4
18:1(n-7)	5.5
18:1(n-9)	5.1
20:1(n-7)	2.6
20:1(n-9+n-11)	2.6
22:1	0.0
24:1	0.0
Total	**22.4**
Polyunsaturates	
18:2(n-6)	0.8
18:3(n-3)	0.0
18:3(n-6)	0.4
18:4(n-3)	1.6
20:2(n-6)	1.1
20:3(n-6)	0.4
20:4(n-3)	1.7
20:4(n-6) AA	4.8
20:5(n-3) EPA	11.5
22:3(n-3)	0.5
22:4(n-6)	1.4
22:5(n-3)	2.2
22:5(n-6)	0.9
22:6(n-3) DHA	12.1
Total	**39.6**

cuttlefish *Sepia pharaonis* 23 607008



Summary

Oil	0.8 %
	mg/100g (wet)
20:4(n-6) AA	38
20:5(n-3) EPA	45
22:6(n-3) DHA	124
(n-3)/(n-6)	3.8

Oil Content

Oil Class	mg/100g (wet)
Total oil	**802**
Wax ester*	0
Triglyceride	2
Free fatty acid	1
Cholesterol	123
Polar oil	676

Fatty Acids

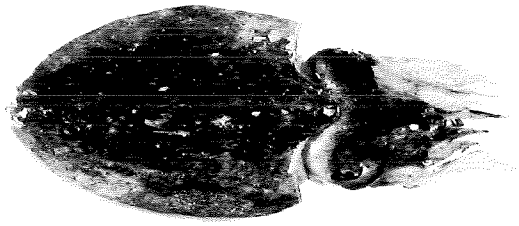
Total fatty acids	**406**
Total saturates	154
Total monounsaturates	33
Total polyunsaturates	219
Total (n-3)	173
Total (n-6)	46

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.3
15:0	0.8
16:0	16.8
17:0	2.2
18:0	13.3
20:0	1.3
22:0	0.0
24:0	0.0
Total	**37.2**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	0.5
16:1(n-9)	0.0
17:1(n-8)	0.2
18:1(n-7)	1.4
18:1(n-9)	4.1
20:1(n-7)	0.0
20:1(n-9+n-11)	2.0
22:1	0.0
24:1	0.0
Total	**8.2**
Polyunsaturates	
18:2(n-6)	0.6
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.1
20:2(n-6)	0.5
20:3(n-6)	0.1
20:4(n-3)	0.0
20:4(n-6) AA	9.4
20:5(n-3) EPA	11.2
22:3(n-3)	0.0
22:4(n-6)	0.6
22:5(n-3)	0.9
22:5(n-6)	0.0
22:6(n-3) DHA	31.1
Total	**54.7**

cuttlefish *Sepia hedleyi* 23 607021



Summary

Oil	1.5 %
	mg/100g (wet)
20:4(n-6) AA	24
20:5(n-3) EPA	125
22:6(n-3) DHA	191
(n-3)/(n-6)	9.6

Oil Content

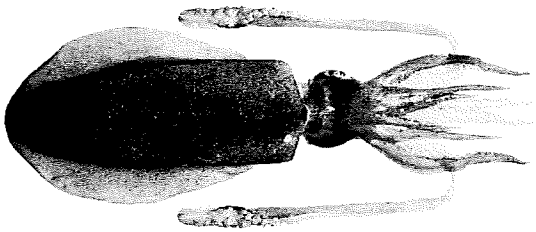
Oil Class	mg/100g (wet)
Total oil	**1517**
Wax ester*	0
Triglyceride	1
Free fatty acid	2
Cholesterol	197
Polar oil	1317
Fatty Acids	
Total fatty acids	**694**
Total saturates	248
Total monounsaturates	79
Total polyunsaturates	367
Total (n-3)	332
Total (n-6)	35

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.9
15:0	0.6
16:0	23.8
17:0	1.6
18:0	7.8
20:0	0.4
22:0	0.2
24:0	0.1
Total	**35.8**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	0.4
16:1(n-9)	0.2
17:1(n-8)	0.2
18:1(n-7)	1.6
18:1(n-9)	2.4
20:1(n-7)	0.3
20:1(n-9+n-11)	5.0
22:1	0.6
24:1	0.2
Total	**11.4**
Polyunsaturates	
18:2(n-6)	0.1
18:3(n-3)	0.0
18:3(n-6)	0.5
18:4(n-3)	0.2
20:2(n-6)	0.2
20:3(n-6)	0.1
20:4(n-3)	0.1
20:4(n-6) AA	3.4
20:5(n-3) EPA	18.1
22:3(n-3)	0.1
22:4(n-6)	0.3
22:5(n-3)	2.0
22:5(n-6)	0.3
22:6(n-3) DHA	27.5
Total	**52.8**

northern calamari *Sepioteuthis lessoniana* 23 617006



Summary

Oil	1.6 %
	mg/100g (wet)
20:4(n-6) AA	57
20:5(n-3) EPA	85
22:6(n-3) DHA	192
(n-3)/(n-6)	3.4

Oil Content

Oil Class	mg/100g (wet)
Total oil	**1580**
Wax ester*	0
Triglyceride	5
Free fatty acid	3
Cholesterol	230
Polar oil	1342

Fatty Acids

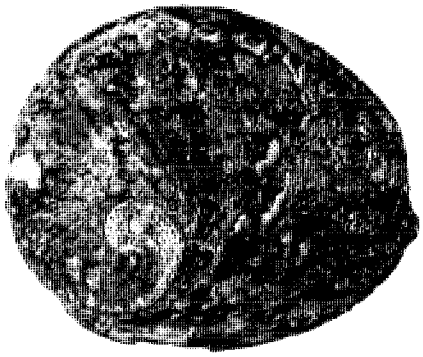
Total fatty acids	**770**
Total saturates	331
Total monounsaturates	67
Total polyunsaturates	372
Total (n-3)	287
Total (n-6)	85

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.8
15:0	0.8
16:0	27.6
17:0	1.6
18:0	10.2
20:0	0.3
22:0	0.2
24:0	0.1
Total	**42.9**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	0.7
16:1(n-9)	0.0
17:1(n-8)	0.2
18:1(n-7)	1.7
18:1(n-9)	3.0
20:1(n-7)	0.1
20:1(n-9+n-11)	2.0
22:1	0.5
24:1	0.2
Total	**8.5**
Polyunsaturates	
18:2(n-6)	0.3
18:3(n-3)	0.0
18:3(n-6)	0.4
18:4(n-3)	0.1
20:2(n-6)	0.4
20:3(n-6)	0.1
20:4(n-3)	0.1
20:4(n-6) AA	7.3
20:5(n-3) EPA	10.9
22:3(n-3)	0.0
22:4(n-6)	0.9
22:5(n-3)	1.1
22:5(n-6)	1.5
22:6(n-3) DHA	25.4
Total	**48.6**

abalone *Haliotis conicopora* 24 038002



Summary

Oil	1.0 %
	mg/100g (wet)
20:4(n-6) AA	68
20:5(n-3) EPA	40
22:6(n-3) DHA	1
(n-3)/(n-6)	1.2

Oil Content

Oil Class	mg/100g (wet)
Total oil	**972**
Wax ester*	0
Triglyceride	0
Free fatty acid	3
Cholesterol	131
Polar oil	838
Fatty Acids	
Total fatty acids	**511**
Total saturates	170
Total monounsaturates	103
Total polyunsaturates	237
Total (n-3)	131
Total (n-6)	106

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	2.6
15:0	2.1
16:0	18.5
17:0	2.6
18:0	6.5
20:0	0.1
22:0	0.0
24:0	0.3
Total	**33.3**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	1.1
16:1(n-9)	0.3
17:1(n-8)	0.7
18:1(n-7)	7.2
18:1(n-9)	7.4
20:1(n-7)	0.1
20:1(n-9+n-11)	3.0
22:1	0.3
24:1	0.0
Total	**20.3**
Polyunsaturates	
18:2(n-6)	0.6
18:3(n-3)	0.0
18:3(n-6)	1.4
18:4(n-3)	0.2
20:2(n-6)	0.3
20:3(n-6)	0.4
20:4(n-3)	0.2
20:4(n-6) AA	13.4
20:5(n-3) EPA	7.8
22:3(n-3)	5.1
22:4(n-6)	4.4
22:5(n-3)	12.2
22:5(n-6)	0.2
22:6(n-3) DHA	0.2
Total	**46.4**

abalone *Haliotis roei*

24 038005

Summary

Oil	0.9 %
	mg/100g (wet)
20:4(n-6) AA	49
20:5(n-3) EPA	25
22:6(n-3) DHA	1
(n-3)/(n-6)	1.6

Oil Content

Oil Class	mg/100g (wet)
Total oil	**884**
Wax ester*	0
Triglyceride	0
Free fatty acid	0
Cholesterol	87
Polar oil	796

Fatty Acids

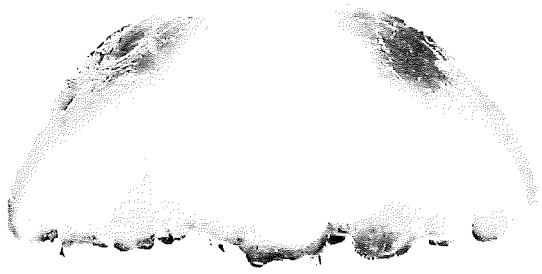
Total fatty acids	**444**
Total saturates	145
Total monounsaturates	101
Total polyunsaturates	198
Total (n-3)	122
Total (n-6)	76

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.2
15:0	1.0
16:0	19.9
17:0	2.1
18:0	7.1
20:0	0.1
22:0	0.1
24:0	0.6
Total	**32.6**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	1.2
16:1(n-9)	0.1
17:1(n-8)	0.6
18:1(n-7)	7.9
18:1(n-9)	10.1
20:1(n-7)	0.1
20:1(n-9+n-11)	2.3
22:1	0.3
24:1	0.0
Total	**22.8**
Polyunsaturates	
18:2(n-6)	0.8
18:3(n-3)	0.0
18:3(n-6)	1.0
18:4(n-3)	0.4
20:2(n-6)	0.3
20:3(n-6)	0.3
20:4(n-3)	0.3
20:4(n-6) AA	11.0
20:5(n-3) EPA	5.5
22:3(n-3)	5.9
22:4(n-6)	3.5
22:5(n-3)	14.9
22:5(n-6)	0.3
22:6(n-3) DHA	0.3
Total	**44.6**

jellyfish *Aurelia aurita* 11 133001



Summary

Oil	0.1 %
	mg/100g (wet)
20:4(n-6) AA	0.1
20:5(n-3) EPA	0.0
22:6(n-3) DHA	0.0
(n-3)/(n-6)	0.6

Oil Content

Oil Class	mg/100g (wet)
Total oil	**133**
Wax ester*	10
Triglyceride	5
Free fatty acid	42
Cholesterol	8
Polar oil	68
Fatty Acids	
Total fatty acids	**92.5**
Total saturates	75.6
Total monounsaturates	15.7
Total polyunsaturates	1.1
Total (n-3)	0.4
Total (n-6)	0.7

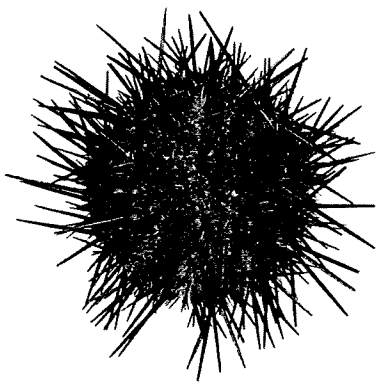
*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	4.9
15:0	1.9
16:0	53.6
17:0	3.4
18:0	14.7
20:0	0.6
22:0	0.3
24:0	0.8
Total	**81.7**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	3.7
16:1(n-9)	0.3
17:1(n-8)	0.3
18:1(n-7)	2.4
18:1(n-9)	6.8
20:1(n-7)	0.3
20:1(n-9+n-11)	0.9
22:1	1.3
24:1	0.8
Total	**17.0**
Polyunsaturates	
18:2(n-6)	0.2
18:3(n-3)	0.0
18:3(n-6)	0.0
18:4(n-3)	0.4
20:2(n-6)	0.5
20:3(n-6)	0.0
20:4(n-3)	0.0
20:4(n-6) AA	0.1
20:5(n-3) EPA	0.0
22:3(n-3)	0.0
22:4(n-6)	0.0
22:5(n-3)	0.0
22:5(n-6)	0.0
22:6(n-3) DHA	0.0
Total	**1.2**

sea urchin† *Heliocidaris erythrogramma* 25 247001

†roe



Summary

Oil	12.5 %
	mg/100g (wet)
20:4(n-6) AA	219
20:5(n-3) EPA	300
22:6(n-3) DHA	16
(n-3)/(n-6)	0.7

Oil Content

Oil Class	mg/100g (wet)
Total oil	**12487**
Diacylglyceryl ether*	6528
Triglyceride	3782
Free fatty acid	224
Cholesterol	168
Polar oil	1785

Fatty Acids

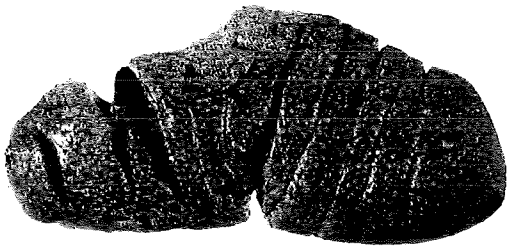
Total fatty acids	**3687**
Total saturates	1996
Total monounsaturates	769
Total polyunsaturates	922
Total (n-3)	387
Total (n-6)	535

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	31.1
15:0	0.5
16:0	17.3
17:0	0.1
18:0	3.8
20:0	0.5
22:0	0.0
24:0	0.7
Total	**54.1**
Monounsaturates	
16:1(n-5)	0.0
16:1(n-7)	0.4
16:1(n-9)	0.2
17:1(n-8)	0.1
18:1(n-7)	1.6
18:1(n-9)	11.1
20:1(n-7)	3.0
20:1(n-9+n-11)	3.4
22:1	0.1
24:1	0.7
Total	**20.6**
Polyunsaturates	
18:2(n-6)	5.7
18:3(n-3)	0.0
18:3(n-6)	0.8
18:4(n-3)	0.6
20:2(n-6)	1.1
20:3(n-6)	0.1
20:4(n-3)	0.9
20:4(n-6) AA	6.1
20:5(n-3) EPA	8.3
22:3(n-3)	0.0
22:4(n-6)	0.3
22:5(n-3)	0.5
22:5(n-6)	0.5
22:6(n-3) DHA	0.4
Total	**25.2**

beche-de-mer *Holothuria scabra* 25 416004



Summary

Oil	0.2 %
	mg/100g (wet)
20:4(n-6) AA	90
20:5(n-3) EPA	45
22:6(n-3) DHA	1
(n-3)/(n-6)	0.5

Oil Content

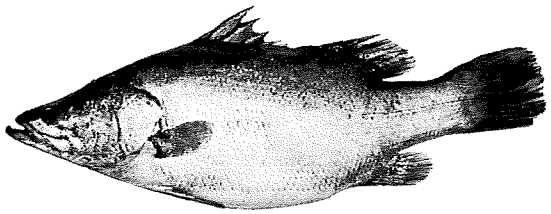
Oil Class	mg/100g (wet)
Total oil	**173**
Wax ester*	0
Triglyceride	13
Free fatty acid	0
Cholesterol	2
Polar oil	158
Fatty Acids	
Total fatty acids	**55**
Total saturates	17
Total monounsaturates	15
Total polyunsaturates	16
Total (n-3)	6
Total (n-6)	11

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	0.7
15:0	0.9
16:0	9.7
17:0	1.4
18:0	10.6
20:0	4.2
22:0	3.0
24:0	1.6
Total	**35.5**
Monounsaturates	
16:1(n-5)	0.1
16:1(n-7)	2.4
16:1(n-9)	0.0
17:1(n-8)	0.7
18:1(n-7)	1.8
18:1(n-9)	2.2
20:1(n-7)	0.7
20:1(n-9+n-11)	12.5
22:1	5.0
24:1	5.8
Total	**31.1**
Polyunsaturates	
18:2(n-6)	0.5
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	0.7
20:2(n-6)	1.1
20:3(n-6)	0.2
20:4(n-3)	0.1
20:4(n-6) AA	19.1
20:5(n-3) EPA	8.2
22:3(n-3)	0.0
22:4(n-6)	0.5
22:5(n-3)	0.2
22:5(n-6)	1.1
22:6(n-3) DHA	1.5
Total	**33.4**

Nile perch *Lates niloticus* 37 310790



Summary

Oil	0.8 %
	mg/100g (wet)
20:4(n-6) AA	32
20:5(n-3) EPA	20
22:6(n-3) DHA	85
(n-3)/(n-6)	2.2

Oil Content

Oil Class	mg/100g (wet)
Total oil	**834**
Wax ester*	0
Triglyceride	270
Free fatty acid	27
Cholesterol	33
Polar oil	504

Fatty Acids

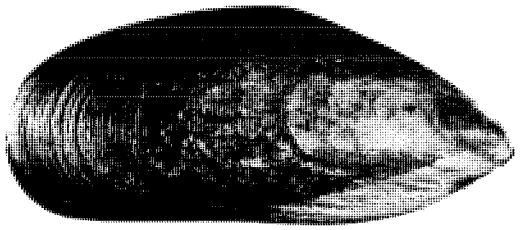
Total fatty acids	**513**
Total saturates	180
Total monounsaturates	131
Total polyunsaturates	199
Total (n-3)	136
Total (n-6)	62

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	1.5
15:0	0.3
16:0	20.9
17:0	1.0
18:0	9.2
20:0	0.2
22:0	0.1
24:0	0.3
Total	**34.5**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	6.5
16:1(n-9)	0.2
17:1(n-8)	0.6
18:1(n-7)	4.4
18:1(n-9)	10.2
20:1(n-7)	0.1
20:1(n-9+n-11)	0.4
22:1	0.1
24:1	0.6
Total	**23.3**
Polyunsaturates	
18:2(n-6)	1.2
18:3(n-3)	0.0
18:3(n-6)	0.3
18:4(n-3)	0.2
20:2(n-6)	0.2
20:3(n-6)	0.3
20:4(n-3)	0.2
20:4(n-6) AA	7.0
20:5(n-3) EPA	4.0
22:3(n-3)	0.0
22:4(n-6)	1.1
22:5(n-3)	5.8
22:5(n-6)	3.0
22:6(n-3) DHA	17.9
Total	**41.3**

green mussel *Perna canaliculus* 23 220751



Summary

Oil	1.8 %
	mg/100g (wet)
20:4(n-6) AA	24
20:5(n-3) EPA	191
22:6(n-3) DHA	140
(n-3)/(n-6)	7.1

Oil Content

Oil Class	mg/100g (wet)
Total oil	**1790**
Wax ester*	0
Triglyceride	376
Free fatty acid	211
Cholesterol	113
Polar oil	1076
Fatty Acids	
Total fatty acids	**1046**
Total saturates	293
Total monounsaturates	212
Total polyunsaturates	463
Total (n-3)	390
Total (n-6)	55

*includes hydrocarbon and steryl ester

Fatty Acid Composition

Fatty Acid	Percent (%)
Saturates	
14:0	3.4
15:0	0.6
16:0	16.5
17:0	1.1
18:0	4.3
20:0	0.1
22:0	0.1
24:0	0.2
Total	**28.5**
Monounsaturates	
16:1(n-5)	0.2
16:1(n-7)	8.2
16:1(n-9)	0.1
17:1(n-8)	0.1
18:1(n-7)	3.2
18:1(n-9)	2.1
20:1(n-7)	1.5
20:1(n-9+n-11)	3.2
22:1	0.0
24:1	0.0
Total	**20.3**
Polyunsaturates	
18:2(n-6)	1.5
18:3(n-3)	0.0
18:3(n-6)	0.2
18:4(n-3)	1.8
20:2(n-6)	0.4
20:3(n-6)	0.2
20:4(n-3)	2.1
20:4(n-6) AA	2.4
20:5(n-3) EPA	17.9
22:3(n-3)	0.0
22:4(n-6)	0.4
22:5(n-3)	1.5
22:5(n-6)	0.3
22:6(n-3) DHA	13.5
Total	**47.4**

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Index of scientific names

All species included in volumes I and II of *Seafood the Good Food* are listed here by genus and species name. Species included in volume I are noted by 'I'.
Page numbers are provided for species in this volume. In both volumes species are presented in order of their CAAB (Code for Australian Aquatic Biota).

A

B

C

D

E

M

N

S

T

U

V

Y

Z

Index of marketing and common names

All species included in volumes I and II of *Seafood the Good Food* are listed here by their approved marketing name and in some cases their more common name. The *Australian Seafood Handbook* contains further common and marketing names. Species included in volume I are noted by 'I'. Page numbers are provided for species in this volume. In both volumes, species are presented in order of their CAAB (Code for Australian Aquatic Biota).

R

S

Seafood

THE GOOD FOOD II

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