

D. RUSSELL ALGRAEIDS  
GH BALAZSFILES  
1970s - 1990s PART 4 of 4

George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822-2396

20 November 1993

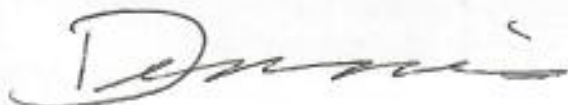
Dear George,

I received your note concerning the reprints and one sample from Rose Atoll, which arrived alone in a large box. I looked for another sample inside, but guess there was only one, and no note.

Good news! I have just been hired by the University of Alaska Southeast, Juneau. It is a full-time position, good pay, with promise of tenure and promotion. This campus also houses the University of Alaska Fisheries Laboratories and a branch of the National Marine Fisheries (NOAA). I will be starting classes up there on 14 January 1994.

One of my students brought this article on the headless Leatherback to class the other day. I read part of it to the class and am sending it on to you for your news article collection.

Aloha,



Dennis J. Russell  
P.O. Box 655  
Mountlake Terrace, WA 98043  
(206) 258-8028

I'll keep this box open for  
a couple months → March 1994.  
I'll send you my new address  
in early January 1994

George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822-2396

11 December 1993

Dear George,

Thank you for the encouraging letter and article about turtles in Alaska. Here is the results from the Rose Atoll sample you wanted.

11-05-93 American Samoa, Rose Atoll outer reef

Microdictyon japonicum Setchell

Caulerpa urvilliana Montagne


Polysiphonia sp. (trace) epiphytic on Microdictyon

The majority of the sample was M. japonicum with C. urvilliana making up about 30%.

I have taken a look at the (8-93 Select Indian River) Florida samples, but need to look a few things up before sending the IDs. One of the samples had a seagrass that looks something like Halophila in it.

Most of my belongings are packed right now and soon I will be settling into a condominium near the Auke Bay laboratories and University of Alaska SE campus. I will send you my new P.O. box at Auke Bay and electronic mail numbers as soon as possible.

Aloha,



Dennis J. Russell  
Biology Department  
University of Alaska Southeast  
11120 Glacier Highway  
Juneau, Alaska 99801-8671

(this address is good after 28 December 1993)

Shown -





33 ALGAE SAMPLES COLLECTED FROM NECROPSIED GREEN TURTLES  
 MARINE TURTLE RESEARCH PROGRAM, N M F S  
 Submitted to Dr. Russell on 5-13-94

( - Identification on Samples - )

NAME	DATE	LOCATION	SAMPLE SITE
Tag 5275 & 3784	6-25-91	Laysan Island	Stomach only
Susan Medeiros SSG	4-24-93	K-Bay; Kahaluu	Forestomach
Steve Evans SSG	4-24-93	Heeia Kea B. H.	Stomach
Mrs. George Akau	4-24-93	Kekela Bay	Stomach
Russ Miya	4-29-93B	Kaneohe Bay (Molii)	Forestomach
Brooks Tamaye	4-30-93	Kahului Bay, Maui	Upper stomach
Wayne German	5-2-93	Kaneohe Bay	Forestomach
George Balazs	5-12-93	McGregor Point/Maui	Mouth
Karen Muth	5-17-93	Malaekahana B.Park	Forestomach
Annie Silva	5-24-93	Reef Runway S.Oahu	Forestomach
Heather Newman SSG	6-6-93	Waialua Beach	Forestomach
Skip Tracy SSG	6-19-93	Hawaii Kai Marina	Forestomach
Skippy Hau	6-21-93	Kahului Harbor/Maui	Forestomach
Kerry Yasui	6-29-93	Waikiki	Forestomach
ID 11620	6-29-93	K-Bay	Mouth
Mr Kadekawa	7-7-93	Lahilahi Pt	Forestomach
Valerie Campbell	7-27-93	Camp Erdman, Waialua	Forestomach
R. Miya	7-29-93	Honokowai, Maui	Fecal Pellet
SSG-Ray Boland	7-30-93	Kawela Bay	Forestomach
Frances Ring	7-31-93	Waialua	Forestomach
Gerry Villalobos	8-20-93	Barbers Pt Harbor	Forestomach
Jay Kegley	8-24-93	Kahului Break/Maui	Forestomach
Mrs Davis	8-27-93	Makapuu Beach Park	Forestomach

NAME	DATE	LOCATION	SAMPLE SITE
HPD Off D Vollrath	9-6-93	Kaika St Rec park	Forestomach
Terrance/Chad-SSG	9-11-93	Makaha Beach Park	Forestomach
Brandon Hillis	9-15-93	Kawainui Canal	Forestomach
Al Rogers	9-16-93	Kahana Bay B.P.	Forestomach
Calvin Ah Loy	9-17-93	Baldwin B.P./Maui	Forestomach
Annette Talamoa	9-23-93	Barbers Point NAS	Forestomach
Brenda/Ray Boland	9-27-93	Kahaluu Beach	Forestomach
Jose Badis	9-28-93	Makaha Beach Park	Forestomach
Jose Badis	9-28-93	Makaha Beach Park	2nd Stomach
SSG / Chad	10-2-93	Kahuku side of sharks cove	Forestomach
William Stern	10-3-93B	Kualoa	Forestomach

34 ALGAE SAMPLES COLLECTED FROM GREEN SEA TURTLES  
 MARINE TURTLE RESEARCH PROGRAM, N M F S  
 SUBMITTED TO DR. RUSSELL ON 5-13-94

NAME	DATE	LOCATION	SAMPLE SITE
DENNIS PESCH	10-8-93	SUNSET BEACH	FORESTOMACH
GEORGE COOK/HPD	10-9-93	MOKULEIA BEACH	FORESTOMACH
VERTA BETANCOURT	10-13-93	CAMP MOKULEIA	FORESTOMACH
MARK MORGAN	10-21-93	WEST LOCH	FORESTOMACH
GARY ROPERT	10-23-93	HALEIWA	FORESTOMACH
BECKY DUNNING	10-31-93	LAENANI BCH PARK	FORESTOMACH
MR. MATO	11-3-93	HICKAM AFB	FORESTOMACH
DENNIS TOBA	11-5-93	WAIALEE BEACH	STOMACH
PAT VIA PAO(T. SHEARER)	11-13-93	KUALOA BCH PARK	FORESTOMACH
DOCARE	11-14-93	KAILUA	FORESTOMACH
ERNIE REESE	11-20-93	KANEOHE BAY/WAIKANE	FORESTOMACH
PABLO BUCKINGHAM	12-1-93	MALAEKAHANA BCH PARK	STOMACH
JOHN S. FAIRIS via MIKE SILBERNAGLE(USFWS)	12-2-93	HALEIWA BCH PARK	STOMACH
BILL KUAMOO	12-13-93	HAUULA	FORESTOMACH
PAUL SCHUFT	12-13-93	WAIALUA	FORESTOMACH
RON JACKSON	12-17-93	BARBER'S PT. NAS	FORESTOMACH
PORT CAPT. P.J. SAXTON	1-3-94	KANEOHE BAY YACHT CLUB	STOMACH
JOANNE PETTIGREW	1-12-94	HALEIWA	FORESTOMACH
TERRY GAETA	1-13-94	IROQUOIS PT.	FORESTOMACH
DOCARE via CYNTHIA VANDERLIP	1-17-94	KAILUA BEACH	STOMACH
BARBARA HUDGINS	2-3-94	KAILUA BAY (CASTLE PT.)	FORESTOMACH



DOCARE	3-5-94	ALA MOANA BCH PARK	FORESTOMACH
BOB MONCRIEF	3-6-94	KAILUA BAY	FORESTOMACH
JACKLYN BOYER	3-9-94	KAILUA BEACH	FORESTOMACH
AL ROGERS	3-14-94	KAHANA BAY	FORESTOMACH
ANONYMOUS via SEA LIFE PK	3-16-94	WAIMANALO BCH PARK	FORESTOMACH
JACOB CHUN	3-24-94	KANEOHE BAY	FORESTOMACH
STEVE STRUCKMAN	4-10-94	WAIALUA	FORESTOMACH
JERRY KERMODE	4-11-94	POUNDER'S BEACH	STOMACH
MARK HECKMAN	4-13-94	WAIKIKI	FORESTOMACH
MERLIN OKADA	4-19-94	KANEOHE BAY	FORESTOMACH
BILL KUAMOO	4-22-94	PUNALUU	FORESTOMACH
FLORIDA GREEN TURTLE	5-3-94	FLORIDA	SECRETORY CONTENTS
FLORIDA GREEN TURTLE	5-3-94	FLORIDA	ESOPHAGUS CONTENTS



George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822 - 2396

20 April 1994

Dear George,

Here are the results of the last samples you sent to me. Most are from Florida and I am really not familiar with the algae there, however, I have several references from there and gave it a good try so you will have at least a good idea of what they could be. With this group of samples completed you have 30 more to your credit, plus the service order I just submitted, so you will have 78 samples to your credit. I am now well established in my new job here in Alaska and hope it will last beyond the "trial period" of 1 1/2 years, when I will have to compete for the position again. I received reprints of our joint paper and it looks great.

I would like to present this paper at the Pacific Science Congress in Beijing, June 1995, is that ok with you? Do you have any slides that I could copy and use?

Next, I will continue with my little project of making an identification booklet for turtle gut analysis. It has been interrupted many times, it will contain drawings of the bits and pieces of Hawaiian alga, macerated and digested as in sea turtles. It will also contain changes in nomenclature and the up-dated nomenclature. Joint publication with you again?

Eve Clute is running for the House of Representatives, she sent me a button, pencils and a brochure of her campaign. Bill Magruder is visiting her this week. She is certainly a welcome and active person when it comes to these seaweed problems.

8/93 Indian River (Bottom Drift)

<u>Caulerpa mexicana</u>	Most of the sample
<u>Acanthophora spicifera</u>	Trace
<u>Chondria sp.</u>	Trace
<u>Halimeda sp.</u>	Trace
<u>Hypnea cervicornis</u>	Trace





8/93 Indian River (Select)

Halophila englemanni\* (but no scaley rhizome) Most all the sample  
Polysiphonia sp. Trace

8/13/93 N2399

Gracilaria sp. (?) Most of the sample  
Ceramium sp. Trace  
Chondria sp. Trace  
Halophila englemanni\* Trace  
Hypnea sp. Trace  
Jania sp. Trace  
Spyridia filamentosa Trace  
\*sea grass

8/93 N2396

Gracilaria sp. Mostly of the sample  
Acanthophora spicifera Trace  
Hypnea cervicornis Trace  
Halophila englemanni Trace

11-5-93 American Samoa Rose Atoll outer reef

Microdictyon japonicum 60%  
Caulerpa urvilleana 40  
Polysiphonia sp. Trace

Thank you for the news articles.... and keep the samples coming.

Aloha,

*Dennis*

Dennis J. Russell  
PO Box 210435  
Auke Bay, AK 99821

*My private P.O. Box*

*P.S. I'm now on a 486 PC with  
microsoft windows & word 6.0.  
also, I'm continuing learning  
Mandarin Chinese and plan  
to tour the Northern Coast of China  
down to Shanghai for 1 month after the PSC.*



Date:

Algae samples submitted to Dr. Dennis Russell, 4408 237th  
 Place, S.W. Mount Lake Terrace, WA 98043.

Box #3

by George Balaza  
 NMFS, Honolulu Laboratory  
 2570 Dole Street  
 Honolulu, Hawaii 96822-2396

<u>SAMPLE ID.</u>	<u>LOCATION</u>	<u>DESCRIPTION</u> (Necropsy samples)
06-09-92 ✓	Kaneohe Bay; Mr. Yoshioka	From: Stomach
06-10-92 ✓	Makena, Maui; Dr. Kehler	Stomach
06-25-92 ✓	Lae Hi, Lanai; Sample A	Fecal pellet (beached)
06-25-92 ✓	" " ; Sample C	" " "
06-25-92 ✓	" " ; Sample D	" " "
06-25-92 ✓	" " ; Sample 3	" " "
06-26-92 ✓	Waianae; Trent Cypriano	Stomach
06-29-92 ✓	Turtle Bay Hilton; Roy Nacapuy	Stomach
07-06-92 ✓	Waimanalo State Park; Paul Chong via Steve Kaiser	Intestine
07-08-92 ✓	Kaneohe Bay; Craig Nakamura	Stomach
07-19-92	Laniakea (North Shore); Bob Rath	Stomach
07-14 92	Kona; Big Island w/o Tumors Pete Hendricks	Forestomach
05 - 92	Palaau, Molokai w/Tumors #H707	Stomach
08-18-92	S. Kona, Big Is. w/o Tumors; Gordon Joyce	Forestomach
08-21-92	Kapalua Bay Hotel, Maui w/o Tumors	Forestomach
08-24-92	Waiialae Bch Pk. w/Tumors Jerry Crow/mike	Stomach
08-24-92	Waiialae Bch Pk. w/o Tumors Jerry Crow	Forestomach
09-22-92	K-Bay #Y80 w/Tumors AA HI92-47	Stomach
09-22-92	K-Bay W/Tumors AA HI92-46	Stomach
09-23-92	K-Bay AOL W/Tumors AA HI92-49	2nd Stomach
09-23-92	K-Bay AOL w/Tumors AA HI92-49	Forestomach
08-01-92	East Is. FFS moto U-166	CROP
08-01-92	East Is. FFS moto U-166	Intestine





~~EDWAL~~  
JANINE

~~BAJ~~



**University of Alaska Southeast**

Juneau • Ketchikan • Sitka

School of Education, Liberal Arts and Science

Juneau Campus

*D. Russ*  
*I thank you*  
*for the at the*

*we. Still in*  
*AZ*  
*could? CA*

George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822 - 2396

*Home*  
*(907)*  
*789-1621*

25 July 1994

Dear George,

Yes, I am trying to find out what that "Sargassum" is and will give it a try at the University of Washington when I go South, 25 July - 15 August. With these latest 68 samples finished I am now caught up and you still have 7 samples to your credit, including the 5-2-94 Wayne German sample, which I suspect didn't get into the package. I double checked the packing and the list and couldn't find it. All is going well here in Alaska, like you would never believe. It's great!

*Alaka*  
*Dennis*

*120*  
*\$1680*  
*\$14 each*





George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822 - 2396

11 May 1994

Dear George,

I just turned in the grades for the two classes I taught this semester, and am very pleased with the way things went here in the cold North. With these samples you have 75 samples to your credit. Here are the results:

3-11-94 PM-1993-151-1 Pratt Museum, Green Sea Turtle, contents of small intestines.

All of the contents were Cnidarians (Jellyfish)

3-11-94 PM-1993-151-1 Pratt Museum, Green Sea Turtle, liquid stomach contents

All of the contents were Cnidarians (Jellyfish)

Loggerhead  
→

10-07-90 DJH - 006T, Intestine (PRIORITY) Nagoya Necropsy

All of the contents was a Sargassum (?)

I have never seen this "Sargassum" before and it has characteristics that remind me of Cystoseira and even Turbinaria, but I suspect it is a pelagic Sargassum species from Asia. There are Asian algae growing in the Aleutians and I have been trying to find my Aleutian Island specimens from Michael Wynne to see if I have one like it, although no Sargassums are reported from Northern Alaska. The only Sargassum on the west coast is S. muticum, and I know it is definitely not that species.

I will keep one piece here for a reference and keep working on it and send you the majority, just in case you run across a Chinese or Japanese algologist who might recognize it. I have only one Chinese algology book in my library and none of thier Sargassum species or Sargassum related genera look like the sample. Doty donated several such books to the Bishop Museum.



The Jellyfish were very interesting, but a bit lacking in jelly. The Jellyfish looked like squeezed rags, lots of muscle tissue and protein fibers. The nematocysts were abundant and most had been discharged. That was a diffinitive characteristic. I've not seen Jellyfish in Sea Turtle samples before, although I have read an article about this.

Also enclosed is a copy of the letter I received today from Peter and Ursula Keuper - Bennett. Much of what they inquire of me should be directed to you, concerning our paper.

I also enclosed a bunch of re-prints for you (50 came to me). Did you order extra as we discussed? If not, I will send you half of what I have.

Finally, everyone here really likes my work and I will be hired on permanently if at all possible at the end of my year and a half. The State of Alaska, however, is in a financial crunch because of low oil prices and the University is having to reduce its budget by 7% this year. This gives everyone an uneasy feeling, especially new faculty like me. The Dean and I talked this afternoon and he was as positive as possible.

Aloha,  
Dennis

3-11-94 PM-1997-121-1 First Message, Green Sea Turtle  
All of the contents were Christmas (Jellyfish)  
3-11-94 PM-1997-121-1 First Message, Green Sea Turtle  
All of the contents were Christmas (Jellyfish)  
10-07-90 DUH - BOST, Inamine (PRIORITY) Message  
All of the contents were Christmas (Jellyfish)

I have never seen this "organism" before and it has characteristics that remind me of  
Cnidaria and even Tubularia, but I suspect it is a pelagic Siphonophore from Asia.  
I find the Asian algae growing in the Alaskan and I have been trying to find my  
Asian island specimens from Richard Winters to see if I have one like it, although no  
Siphonophores are reported from Northern Alaska. The only Siphonophore on the west coast is  
S. hillebrandii and I know it is definitely not that species.  
I will keep one piece here for a reference and keep working on it and send you the  
rest. Just in case you run across a Chinese or Japanese biologist who might  
recognize it. I have only one Chinese algalogy book in my library and none of them  
Siphonophore section or Siphonophore related genus look like the sample. Don't discard  
any other such books in the Biology Museum.



Algae identification from samples taken from sea turtles

07-06-94 Kawainui Canal, Oahu, Corey Hamilton, tumors, forestomach contents

<u>Acanthophora spicifera</u>	80%
<u>Hypnea musciformis</u>	10
<u>Spyridia filamentosa</u>	10
<u>Cladophoropsis</u> sp.	Trace
<u>Microdictyon</u> sp.	Trace
<u>Polysiphonia</u> sp.	Trace
<u>Sargassum</u> sp.	Trace
Terrestrial plant material	Trace

08-26-94 Kauai, Don Heacock, no tumors, forestomach contents

<u>Rhodymenia anastomosans</u>	50%
<u>Amansia glomerata</u>	20
<u>Galaxaura</u> sp.	10
<u>Hypnea musciformis</u>	10
<u>Dictyota divaricata</u>	Trace
<u>Hypnea cervicornis</u>	Trace
<u>Laurencia nidifica</u>	Trace
<u>Polysiphonia howei</u>	Trace
Diatoms ( <u>Navicula</u> filaments)	Trace
Hydrozoan	Trace

05-11-94 Hoia Bay, Kauai, Mike Hopkins via Don Heacock, no tumors, forestomach contents

<u>Pterocladia capillacea</u>	100%
-------------------------------	------

07-26-94 Kaneohe Bay, P/U, Lester (HIMB), no tumors, forestomach contents

<u>Halophila hawaiiiana</u>	75%
<u>Gracilaria salicornia</u>	20
<u>Acanthophora spicifera</u>	5

05-13-94 Kiholo Bay, Hawaii Island, Bakken via DOCARE, no tumors, forestomach contents

<u>Pterocladia</u> sp.	90%
<u>Turbinaria ornata</u>	10
<u>Dictyota friabilis</u>	Trace
<u>Sphacelaria</u> sp.	Trace



03-11-94 Pratt Museum, PM-1993-151-1, green sea turtle, liquid stomach contents

All sponge (simple small spicules abundant)  
Much epithelial tissue present as well

09-24-94 Kaneohe Bay, Douglas Crompton via R. Boland (SSG), no tumors,  
forestomach contents

<u>Gracilaria salicornia</u>	99%
<u>Acanthophora spicifera</u>	1

09-22-94 Kaneohe Bay, Mark's Reef, K220

<u>Hypnea musciformis</u>	40%
<u>Acanthophora spicifera</u>	30
<u>Gracilaria salicornia</u>	20
<u>Halophila hawaiiiana</u>	10
<u>Cladophoropsis sp.</u>	Trace
<u>Dictyota acuteloba</u>	Trace

12-1-93 Kailua, Gary Sukita, no tumors, forestomach contents

<u>Codium edule</u>	85%
<u>Acanthophora spicifera</u>	5
<u>Halophila hawaiiiana</u>	5
<u>Hypnea musciformis</u>	5
<u>Dictyosphaeria cavernosa</u>	Trace
<u>Dictyota acuteloba</u>	Trace
<u>Halimeda discoidea</u>	Trace
<u>Sargassum polyphyllum</u>	Trace

03-4-94 Kailua Beach, Eric Vanderwoort, unknown tumors, forestomach contents

<u>Hypnea musciformis</u>	75%
<u>Codium edule</u>	10
<u>Codium phasmaticum</u>	10
<u>Halophila hawaiiiana</u>	5
<u>Dictyosphaeria cavernosa</u>	Trace
<u>Laurencia nidifica</u>	Trace
<u>Lyngbya majuscula</u>	Trace
<u>Sargassum polyphyllum</u>	Trace

09-16-94 Maile Beach Park, Waianae Marine Patrol, Danny Gusman via Gerry Villalobos, no tumors, foregut contents

<u>Amansia glomerata</u>	90%
<u>Pterocladia capillacea</u>	10
<u>Microdictyon japonicum</u>	Trace

07-14-94 Kaneohe Bay (Sugar Mill Beach), Richard Freeman, tumors, forestomach contents

<u>Codium edule</u>	50%
<u>Hypnea musciformis</u>	50
<u>Acanthophora spicifera</u>	Trace
<u>Ceramium sp.</u>	Trace
<u>Galaxaura sp.</u>	Trace
<u>Lyngbya majuscula</u>	Trace
<u>Polysiphonia sp.</u>	Trace
<u>Spyridia filamentosa</u>	Trace

Dennis -

Please return this copy  
with the ID Results.

Algae samples sent to Dr. Dennis Russell 11/28/94

Mahalo

ID	DATE	PLACE	TUMORS	SAMPLE
1. Corey Hamilton	7/06/94	Kawainui Canal	Yes	Forestomach
2. Don Heacock	8/26/94	Kauai	No	Forestomach
3. Mike Hopkins via Don Heacock	5/11/94	Hoia Bay, Kauai	No	Forestomach
4. Lester	7/26/94	Kaneohe Bay (HIMB)	No	Forestomach
5. Bakken via DOCARE	5/13/94	Kiholo Bay, Big Island	No	Forestomach
6. Pratt Museum PM-1993-151-1	3/11/94	-	-	Liquid contents
7. Douglas Crompton via Ray Boland (SSG)	9/24/94	Kaneohe Bay	No	Forestomach
8. Tag=K220	9/22/94	Kaneohe Bay Mark's Reef	-	-
9. Gary Sukita	12/1/93	Kailua	No	Forestomach
10. Eric Vanderwoort	3/4/94	Kailua Beach	Unk	Forestomach
11. Danny Gusman via Gerry Villalobos (Waianae Marine Patrol)	9/16/94	Maile BP	No	Forestomach
12. Richard Freeman	7/14/94	Kaneohe Bay Sugar Mill Beach	Yes	Forestomach

- = data not available

HONOLULU LABORATORY  
Southwest Fisheries Center  
2570 Dole Street  
Honolulu, HI 96822-2396





George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822 - 2396

20 February 1995

Dear George,

Here are the first dozen sample identifications, and I have about 20 more coming your way soon. - With this set all past credit is finished (7), plus 5 samples toward the new order (120 samples).

Thank you for the various articles on Vegetable Oil Pollutants, etc., I sent a copy of my article on the vegetable oil spill on Fanning Island to S. Mudge, Gwynedd, UK. I have enclosed a couple of things I received for your information too.

Aloha,

A handwritten signature in cursive script that reads "Dennis J. Russell".

Dennis J. Russell

ALGAE SAMPLES  
FROM NECROPSIED TURTLES

COLLECTED BY  
GEORGE H. BALAZS  
NATIONAL MARINE FISHERIES SERVICE  
2570 DOLE STREET  
HONOLULU, HAWAII 96822-2396

DATE	CONTACT	LOCATION	TUMORS	STOMACH SECTION
1. 07-23-93	Paul Loretero	Kaneohe Bay	Unknown	Forestomach
2. 07-05-94	Dexter Tom (DOCARE) via Skippy Hau (DLNR-Maui)	Kihei, Maui	No	Forestomach
3. 08-06-94	Joe Ganton (Marine Patrol)	Makaha Beach Park	No	Forestomach
4. 11-06-94	Wayne via Ray Boland (SSG)	Kaneohe Bay (Kahaluu)	Yes	Forestomach
5. 12-02-94	Robin Bond	Diamond Head Beach Park	Unknown	Forestomach
6. -	Marie Morin via Thierry Work (USFWS)	Kaloko (Kona), Hawaii	No	Forestomach

Sent to: Dr. Dennis Russell

12/12/94

George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822 - 2396

7 March 1995

Dear George,

The most notable thing I found in this sample is a Physalia (Man-o-war), Siphonophore in sample (12-18-94, Kailua Bay). I waited a week for the seven samples that you said were coming, but am sending these results pronto as you emphasized in your last letter, and will send the others as soon as I get them.

*Aloha,  
Dennis*



NOAA, WASC Finance Division, WC1  
7600 Sand Point Way, N.E.  
BIN C15700  
Seattle, Washington 98115 - 0070

7 March 1995

INVOICE

The Service Order (40-JJNF-4-0128) "Taxonomic identification of algae specimens sampled from stomach and feces of Hawaiian Green Turtles, Chelonia mydas, 120 samples supplied by NMFS", has been completed. Please pay the \$1680.00 amount to:

Dennis J. Russell  
P.O. Box 210435  
Auke Bay, AK 99821

Sincerely,



Dennis J. Russell  
SSN 540-50-2565  
Phone: (907) 789-1621h or 465-6450w

Algae identification from samples taken from sea turtles

07-06-94 Kawainui Canal, Oahu, Corey Hamilton, tumors, forestomach contents

<u>Acanthophora spicifera</u>	80%
<u>Hypnea musciformis</u>	10
<u>Spyridia filamentosa</u>	10
<u>Cladophoropsis</u> sp.	Trace
<u>Microdictyon</u> sp.	Trace
<u>Polysiphonia</u> sp.	Trace
<u>Sargassum</u> sp.	Trace
Terrestrial plant material	Trace

08-26-94 Kauai, Don Heacock, no tumors, forestomach contents

<u>Rhodomenia anastomosans</u>	50%
<u>Amansia glomerata</u>	20
<u>Galaxaura</u> sp.	10
<u>Hypnea musciformis</u>	10
<u>Dictyota divaricata</u>	Trace
<u>Hypnea cervicornis</u>	Trace
<u>Laurencia nidifica</u>	Trace
<u>Polysiphonia howei</u>	Trace
Diatoms ( <u>Navicula</u> filaments)	Trace
Hydrozoan	Trace

05-11-94 Hoia Bay, Kauai, Mike Hopkins via Don Heacock, no tumors, forestomach contents

<u>Pterocladia capillacea</u>	100%
-------------------------------	------

07-26-94 Kaneohe Bay, P/U, Lester (HIMB), no tumors, forestomach contents

<u>Halophila hawaiiensis</u>	75%
<u>Gracilaria salicornia</u>	20
<u>Acanthophora spicifera</u>	5

05-13-94 Kiholo Bay, Hawaii Island, Bakken via DOCARE, no tumors, forestomach contents

<u>Pterocladia</u> sp.	90%
<u>Turbinaria ornata</u>	10
<u>Dictyota friabilis</u>	Trace
<u>Sphacelaria</u> sp.	Trace

03-11-94 Pratt Museum, PM-1993-151-1, green sea turtle, liquid stomach contents

All sponge (simple small spicules abundant)  
Much epithelial tissue present as well

09-24-94 Kaneohe Bay, Douglas Crompton via R. Boland (SSG), no tumors,  
forestomach contents

<u>Gracilaria salicornia</u>	99%
<u>Acanthophora spicifera</u>	1

09-22-94 Kaneohe Bay, Mark's Reef, K220

<u>Hypnea musciformis</u>	40%
<u>Acanthophora spicifera</u>	30
<u>Gracilaria salicornia</u>	20
<u>Halophila hawaiiensis</u>	10
<u>Cladophoropsis sp.</u>	Trace
<u>Dictyota acuteloba</u>	Trace

12-1-93 Kailua, Gary Sukita, no tumors, forestomach contents

<u>Codium edule</u>	85%
<u>Acanthophora spicifera</u>	5
<u>Halophila hawaiiensis</u>	5
<u>Hypnea musciformis</u>	5
<u>Dictyosphaeria cavernosa</u>	Trace
<u>Dictyota acuteloba</u>	Trace
<u>Halimeda discoidea</u>	Trace
<u>Sargassum polyphyllum</u>	Trace

03-4-94 Kailua Beach, Eric Vanderwoort, unknown tumors, forestomach contents

<u>Hypnea musciformis</u>	75%
<u>Codium edule</u>	10
<u>Codium phasmaticum</u>	10
<u>Halophila hawaiiensis</u>	5
<u>Dictyosphaeria cavernosa</u>	Trace
<u>Laurencia nidifica</u>	Trace
<u>Lyngbya majuscula</u>	Trace
<u>Sargassum polyphyllum</u>	Trace



09-16-94 Maile Beach Park, Waianae Marine Patrol, Danny Gusman via Gerry Villalobos, no tumors, foregut contents

<u>Amansia glomerata</u>	90%
<u>Pterocladia capillacea</u>	10
<u>Microdictyon japonicum</u>	Trace

07-14-94 Kaneohe Bay (Sugar Mill Beach), Richard Freeman, tumors, forestomach contents

<u>Codium edule</u>	50%
<u>Hypnea musciformis</u>	50
<u>Acanthophora spicifera</u>	Trace
<u>Ceramium sp.</u>	Trace
<u>Galaxaura sp.</u>	Trace
<u>Lyngbya majuscula</u>	Trace
<u>Polysiphonia sp.</u>	Trace
<u>Spyridia filamentosa</u>	Trace

----- 0 -----

08-23-91 Pearl and Hermes, turtle 01, stomach contents

<u>Halophila hawaiiensis</u>	100%
<u>Centroceros clavulatum</u>	Trace
<u>Spyridia filamentosa</u>	Trace

07-11-94 Kauai, Don Heacock, 46.0 - SCL, no tumors, stomach contents

<u>Amansia glomerata</u>	75%
<u>Pterocladia capillacea</u>	25
<u>Ceramium sp.</u>	Trace
<u>Jania capillacea</u>	Trace
<u>Sphacelaria sp.</u>	Trace

Large clumps of animal sponge material

01-26-95 Kealia Beach, Kauai, Don Heacock (Tarey Low - DOCARE) 38.3 - SCL, no tumor, forestomach contents

<u>Pterocladia capillacea</u>	100%
<u>Ulva rigida</u>	Trace

large clumps of animal sponge material

08-22-94 Kikialoa BA, kauai, Don Heacock, 42.0 - SCL, tumors yes C2, forestomach contents

<u>Pterocladia capillacea</u>	99%
<u>Amansia glomerata</u>	Trace
<u>Ceramium</u> sp.	Trace
Hydrozoan	Trace
Mussel shell	
Plastic scrap - clear and blue	
Seveal clear 50 um diameter monofilament threads	

10-12-94 Launiupoko Beach Park, Maui, Erica via Brooks Tamaye, 37.0 - SCL, no tumors, forestomach

<u>Pterocladia capillacea</u>	100%
<u>Ceramium</u> sp.	Trace
<u>Dictyota friabilis</u>	Trace

12-18-94 Kailua Bay, Kalama Beach, Shane (DOCARE) via Ray Boland (SSG), no tumors, stomach contents

<u>Hypnea musciformis</u>	40
<u>Laurencia nidifica</u>	40
<u>Dictyosphaeria cavernosia</u>	20
<u>Acanthophora spicifera</u>	Trace
<u>Dictyota divaricata</u>	Trace
<u>Halimeda discoidea</u>	Trace
<u>Lobophora variegata</u>	Trace
<u>Sargassum polyphyllum</u>	Trace

One small Physalia (Man-o-War) siphonophore jellyfish

01-23-95 Makai Pier, Waimanalo, Brian O'Conner via Ray Boland (SSG), 44.0 - SCL, no tumors, forestomach contents

<u>Codium phasmaticum</u>	80%
<u>Codium arabicum</u>	10
<u>Amansia glomerata</u>	5
<u>Pterocladia capillacea</u>	5
<u>Dictyopteris plagiogramma</u>	Trace
<u>Jania capillacea</u>	Trace

07-23-93 Kaneohe Bay, Paul Loretero, no tumors, forestomach contents

<u>Codium arabicum</u>	45%
<u>Codium phasmaticum</u>	45
<u>Amansia glomerata</u>	5
<u>Acanthophora spicifera</u>	5
<u>Dictyosphaeria cavernosa</u>	Trace
<u>Gelidium sp.</u>	Trace
<u>Polysiphonia howei</u>	Trace
<u>Sphacelaria furcigera</u>	Trace
<u>Valonia aegagropila</u>	Trace

07-05-94 Kihei, Maui, Dexter Tom / Skippy Hau, no tumors, forestomach

<u>Codium arabicum</u>	50%
<u>Codium edule</u>	30
<u>Pterocladia capillacea</u>	15
<u>Ulva reticulata</u>	5
<u>Dictyota sp.</u>	Trace
<u>Hypnea musciformis</u>	Trace
<u>Laurencia nidifica</u>	Trace
<u>Polysiphonia howei</u>	Trace
<u>Spyridia filamentosa</u>	Trace

08-06-94 Makaha Beach Park, Joe Ganton (Marine Patrol), no tumors, forestomach contents

<u>Pterocladia capillacea</u>	100%
<u>Amansia glomerata</u>	Trace
<u>Chaetomorpha sp.</u>	Trace
<u>Hypnea musciformis</u>	Trace
<u>Ulva fasciata</u>	Trace

11-06-94 Kaneohe Bay, Kahaluu, Wayne via Ray Boland (SSG), tumors, forestomach contents

<u>Acanthophora spicifera</u>	50%
<u>Gracilaria salicornia</u>	50
<u>Spyridia filamentosa</u>	Trace



12-02-94 Diamond Head Beach Park, Robin Bond, unknown tumors, forestomach contents

<u>Acanthophora spicifera</u>	99%
<u>Gracilaria coronopifolia</u>	1
<u>Amansia glomerata</u>	Trace
<u>Chondrus</u> sp.	Trace
<u>Dictyota acuteloba</u>	Trace
<u>Hypnea nidifica</u>	Trace
<u>Laurencia cartilaginea</u>	Trace
<u>Spyridia filamentosa</u>	Trace

-- Kaloko (Kona), Hawaii Island, M. Morin via Thierry Work (USFWS), no tumors, forestomach contents

<u>Pterocladia capillacea</u>	99%
<u>Amansia glomerata</u>	1

----- 0 -----

01-12-94 Kiholo Bay, Hawaii, Balazs, stomach contents

<u>Pterocladia capillacea</u>	100%
<u>Centroceros clavulatum</u>	Trace
<u>Ceramium</u> sp.	Trace

Honaunau, Hawaii Island, Balazs, mouth contents, J855

<u>Ulva fasciata</u>	Trace
Terrestrial plant (leaf) material	

01-05-95 Haleiwa, Alii Beach, tumors, forestomach

<u>Amansia glomerata</u>	50%
<u>Pterocladia capillacea</u>	40
<u>Sargassum echinocarpum</u>	10
<u>Acanthophora spicifera</u>	Trace
<u>Laurencia nidifica</u>	Trace
<u>Laurencia</u> sp.	Trace

01-06-95 Haleiwa BH, Darlene via R. Boland (SSG), tumors, forestomach

<u>Pterocladia capillacea</u>	10
<u>Codium edule</u>	50
<u>Codium arabicum</u>	25
<u>Ulva fasciata</u>	5
<u>Valonia aegagropila</u>	Trace
<u>Hypnea musciformis</u>	5
<u>Jania capillacea</u>	Trace
<u>Acanthophora spicifera</u>	5
<u>Ceramium sp.</u>	Trace
<u>Rhizoclonium sp.</u>	Trace
Diatoms	Trace
Terrestrial plant material	Trace

Copy to  
Morris

George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822-2396

31 October 1992

Dear George,

Here are the results of the next 13 samples you have sent to me, and I am working on more. This leaves you with 24 samples credit. There were only a few unusual things seen, Vidalia sp. (looks somewhat like Amansia), on the stalked Halimeda cylindracea, which had a blue colonial animal crusting its stipe, and a single "fluke" flatworm, of which I drew a picture.

Aloha,



Dennis J. Russell  
P.O. Box 655  
Mountlake Terrace, WA 98043  
Home: (206) 258-8058 (Everett, Washington)





U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Northwest Fisheries Science Center Honolulu Laboratory  
2570 Dole St. • Honolulu, Hawaii 96822-2396

Date:

Algae samples submitted to Dr. Dennis Russell, 4408 237th  
Place, S.W. Mount Lake Terrace, WA 98043.

by George Balazs  
NMFS, Honolulu Laboratory  
2570 Dole Street  
Honolulu, Hawaii 96822-2396

Box #3

<u>SAMPLE ID.</u>	<u>LOCATION</u>	<u>DESCRIPTION</u> (Necropsy samples)
06-09-92 ✓	Kaneohe Bay; Mr. Yoshioka X	From: Stomach
06-10-92 ✓	Makena, Maui; Dr. Kehler X	Stomach
06-25-92 ✓	Lae Hi, Lanai; Sample A X	Fecal pellet (beached)
06-25-92 ✓	" " ; Sample C X	" " "
06-25-92 ✓	" " ; Sample D X	" " "
06-25-92 ✓	" " ; Sample 3 X	" " "
06-26-92 ✓	Waianae; Trent Cypriano X	Stomach
06-29-92 ✓	Turtle Bay Hilton; Roy Nacapuy X	Stomach
07-06-92 ✓	Waimanalo State Park; Paul Chong via Steve Kaiser X	Intestine
07-08-92 ✓	Kaneohe Bay; Craig Nakamura X	Stomach
07-19-92	Laniakea (North Shore); Bob Rath	Stomach
07-14-92	Kona; Big Island w/o Tumors Pete Hendricks	Forestomach
05 - 92	Palaau, Molokai w/Tumors #H707	Stomach
08-18-92	S. Kona, Big Is. w/o Tumors; Gordon Joyce	Forestomach
08-21-92	Kapalua Bay Hotel, Maui w/o Tumors	Forestomach
08-24-92	Waialae bch Pk. w/Tumors Jerry Crow/mike	Stomach
08-24-92	Waialae Bch Pk. w/o Tumors Jerry Crow	Forestomach
09-22-92	K-Bay #Y80 w/Tumors AA HI92-47	Stomach
09-22-92	K-Bay W/Tumors AA HI92-46	Stomach
09-23-92	K-Bay AOL W/Tumors AA HI92-49	2nd Stomach
09-23-92	K-Bay AOL w/Tumors AA HI92-49	Forestomach
08-01-92	East Is. FFS moto U-166	CROP
08-01-92	East Is. FFS moto U-166	Intestine



Algae identification from samples

06/09/92 Stomach contents, No tumors, Mr. Yoshioka, Kaneohe Bay, near HIMB

<u>Halophila hawaiiiana</u>	70%
<u>Acanthophora spicifera</u>	20
<u>Spyridia filamentosa</u>	5
<u>Halymenia formosa</u>	5
<u>Dictyosphaeria cavernosa</u>	Trace
<u>Hypnea sp.</u>	Trace
<u>Polysiphonia sp.</u>	Trace
<u>Sphacelaria sp.</u>	Trace

06/10/92 Stomach contents, no tumors, Maui Prince Hotel (Makena), Dr. Kehler

<u>Pterocladia capillacea</u>	90%
<u>Amansia glomerata</u>	10
<u>Laurencia nidifica</u>	Trace
<u>Sargassum sp.</u>	Trace

06/25/92 Sample A, fecal pellet (beached), Laehi, Lanai

<u>Amansia glomerata</u>	55%
<u>Codium arabicum</u>	15
<u>Sphacelaria tribuloides</u>	15
<u>Valonia aegagropila</u>	10
<u>Turbinaria ornata</u>	5
<u>Ectocarpus indicus</u>	Trace
<u>Gelidium sp.</u>	Trace
<u>Griffithsia sp.</u>	Trace

06/25/92 Sample C, fecal pellet (beached), Laehi, Lanai

<u>Amansia glomerata</u>	70%
<u>Halimeda discoidea</u>	10
<u>Gelidium sp.</u>	5
<u>Sphacelaria tribuloides</u>	5
<u>Turbinaria ornata</u>	5
<u>Valonia aegagropila</u>	5
<u>Boodlea composita</u>	Trace

Terrestrial plant material Trace

06/25/92 "D", fecal pellet (beached), Laehi, Lanai

<u>Amansia glomerata</u>	90%
<u>Sphacelaria tribuloides</u>	Trace
<u>Gelidium sp.</u>	10
<u>Microdictyon japonicum</u>	Trace
<u>Lobophora variegata</u>	Trace
<u>Turbinaria ornata</u>	Trace

06/25/92 Sample 3, fecal pellet (beached), Laehi, Lanai

<u>Amansia glomerata</u>	85%
<u>Sphacelaria tribuloides</u>	5
<u>Valonia aegagropila</u>	5
<u>Gelidium sp.</u>	3
<u>Codium arabicum</u>	2
<u>Boodleia composita</u>	Trace
<u>Ectocarpus indicus</u>	Trace
<u>Halimeda discoidea</u>	Trace

Terrestrial plant material Trace  
Animal skin Trace

06/26/92 stomach contents, no tumors, Waianae,  
Trent Cypriano

<u>Amansia glomerata</u>	95%
<u>Codium edule</u>	5
<u>Ceramium sp.</u>	Trace
<u>Hypnea spinella</u>	Trace
<u>Laurencia sp.</u>	Trace
<u>Microdictyon japonicum</u>	Trace

06/29/92 Turtle Bay Hilton, no tumors, stomach sample,  
Roy Nacapuy

<u>Pterocladia capillacea</u>	70%
<u>Hypnea musciformis</u>	30
<u>Amancia glomerata</u>	Trace
<u>Tolypiocladia calodictyon</u>	Trace

flat worm ----->

07/06/92 Waimanalo State Park, Intestinal contents,  
Steve Kaiser

<u>Codium phasmaticum</u>	85%
<u>Hypnea musciformis</u>	10
<u>Codium edule</u>	5
<u>Sargassum echinocarpum</u>	Trace

sand grains

07/08/92 Stomach contents, Kaneohe Bay (Waikane), tumors,  
Craig Nakamura

<u>Acanthophora spicifera</u>	90%
<u>Hypnea musciformis</u>	5
<u>Laurencia nidifica</u>	5
<u>Gelidium puscillum</u>	Trace
<u>Gracilaria sp.</u>	Trace
<u>Spyridia filamentosa</u>	Trace





06/30/92 H788 #11 Track

<u>Acanthophora spicifera</u>	50%
<u>Hypnea musciformis</u>	50
<u>Dictyota acuteloba</u>	Trace
<u>Hypnea cervicornis</u>	Trace
<u>Laurencia nidifica</u>	Trace
<u>Sargassum sp.</u>	Trace
<u>Spyridia filamentosa</u>	Trace

Skin flecks from the turtle

Kaanapalai, Maui, herbarium specimen to Dr. Magruder, Bishop Museum

Halimeda cylindracea Decaisne  
Vidalia sp. (attached to the holdfast)

Colonial animals, ascidians ?, non-algal, proteinaceous, dark-blue, looks black when dry, encrusting material

07/28/92 #109 Wrasse gut contents, cleaning a turtle

Skin (no algae attached to the skin, all protein material)

George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822-2396

22 November 1992

Dear George,

Here are the results of the next 8 samples you have sent to me, and I am continuing to work on more that are still in their boxes. This leaves you with 66 samples credit.

Notice the Heeia Kea Fish Pond sample !! Two new alien algae are present in it, Gracilaria tikvahiae and Kappaphycus alvarezii (= Eucheuma striatum). I'll add these to our manuscript when I see it again.

Another interesting find is in Dave Woltz's samples from Kaneohe Bay. The samples were packed with boluses of turtle skin and "tissue". Was this turtle biting tumors off of other turtles and eating them?

More ID's coming soon.

Aloha,



Dennis J. Russell  
P.O. Box 655  
Mountlake Terrace, WA 98043  
Home: (206) 258-8058

Algae identification from samples

09/09/92 Heeia Kea fish pond, stomach contents, tumors,  
Kathleen Brooks

<u>Acanthophora spicifera</u>	50%
<u>Gracelaria tikvahiae</u>	20
<u>Kappaphycus alvarezii</u> (= <u>Euclidean striatum</u> )	20
<u>Spyridia filamentosa</u>	10
<u>Hypnea sp.</u>	Trace

03/23/92 Kaneohe Bay; Ltj Ron Casares, intestine

<u>Amansia glomerata</u>	90%
<u>Actinotrichia rigida</u>	4
<u>Liagora sp.</u>	3
<u>Dictyosphaeria cavernosa</u>	2
<u>Pterocladia capillacea</u>	1
<u>Codium edule</u>	Trace
<u>Halimeda sp.</u>	Trace

03/23/92 Heeia Kea Pier; slip 309, Tommy Friel, forestomach

<u>Pterocladia capillacea</u>	90%
Animal sponge	10
<u>Codium edule</u>	Trace
<u>Dictyota crenulata</u>	Trace
<u>Gracilaria salicornia</u>	Trace

03/26/92 Ewa Beach, Newkirk, forestomach & secondary

<u>Hypnea musciformis</u>	80%
<u>Codium edule</u>	10
<u>Siphonocladus tropicus</u>	5
<u>Codium arabicum</u>	2
<u>Acanthophora spicifera</u>	1
<u>Bryopsis sp.</u>	1
<u>Sargassum polyphyllum</u>	1
<u>Amansia glomerata</u>	Trace

sand grains

03/29/92 Kaneohe Marine Corps Air Station, Ltj Casarez,  
forestomach.

<u>Codium arabicum</u>	50%
<u>Codium edule</u>	48
<u>Amansia glomerata</u>	2
<u>Bryopsis pennata</u>	Trace
<u>Dictyosphaeria versluysii</u>	Trace
<u>Microdictyon japonicum</u>	Trace
<u>Polysiphonia sparsa</u>	Trace

sand grains

04/09/92 Kaneohe Bay, Dave Woltz, large intestine contents, no tumors.

Turtle skin	75%
<u>Halophila hawaiiensis</u>	20
Animal sponge	5

Badly digested contents, mostly indescript

04/09/92 Kaneohe Bay, Dave Woltz, crop/stomach contents, no tumors.

Turtle skin	75%
<u>Halophila hawaiiensis</u>	20
Animal sponge	5

04/09/92 stomach sample

<u>Hypnea musciformis</u> (cystocarpic)	80%
<u>Laurencia nidifica</u>	10
<u>Acanthophora spicifera</u>	5
<u>Codium edule</u>	5
<u>Cladophora fascicularis</u>	Trace
<u>Dictyota crenulata</u>	Trace
<u>Padina japonica</u>	Trace
<u>Halimeda discoidea</u>	Trace
<u>Halophila hawaiiensis</u>	Trace



George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822-2396

21 June 1993

Dear George,

Here are the latest results from the 51 samples you sent to me 23 April 1993. This is within our 90 day turn around time for 50+ samples, You had 38 samples credit so this leaves -13 deficit. I will process the new PO now, as per our agreement of 27 March 1991 and that will leave you with 35 samples to your credit.


There were a few interesting items in these samples, such as #2 from Midway Atoll and #29 from "Big Island", both had the exact same type of leech-like flatworm (flake ?) in them. I drew a picture of the critter and stained it blue so it would be easy for someone else to find it in the samples (one worm per sample). Perhaps these tiny leeches (flukes) are living inside the turtle stomach.

Note #33, the Hawksbill sample from Skippy Hau. It had octopus beaks in it and Lepas (Gooseneck Barnacle) shells.

Also, #36 from Hilo Bay, David Frenz. This sample had a seagrass species I have not seen from Hawaii and I called Ron Phillips, described it to him over the phone and he thinks it may be a new species record for Hawaii. I sent him the sample and he is working on its ID now. This may lead to a short publication or note in the future. He knows any publishing from your samples needs to be supervised by you.

I sent a letter to Aquatic Botany last week inquiring about our manuscript and will tell you what happened as soon as I receive any information.

Aloha,

  
Dennis J. Russell  
P.O. Box 655  
Mountlake Terrace, WA 98043

George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822-2396

30 June 1993

Dear George,

I just talked to Ron Phillips about the unknown seagrass I found in your Hilo Bay sample and he says it is definitely not a seagrass species known from Hawaii. The closest species he can find is one from Southeast Asia. This is just a preliminary assessment, but is an exciting find. He suspects it was probably introduced somehow, to the shallow waters in or near Hilo Bay. He has already purchased tickets to Hawaii (Dec 1993) with an aim to collect a bag full of fresh material to study.

The reason I am writing you is to get more information on the exact location where the turtle was found. The sample is #36 on my list, 02/02/93 Hilo Bay (Big Island), forestomach, tumors, David Frenz. Please send me the exact location of the turtle if you can and maybe David's address and/or phone number. The seagrass blades were still green and contained chloroplasts, so it was probably eaten just prior to the turtle's death.

I don't know what will come of this, but my ears perk-up whenever I hear that an "alien" species may be involved.

The address for Aquatic Botany is:

The Editorial Office  
Aquatic Botany  
Editorial Office  
P.O. Box 181  
1000 AD Amsterdam  
THE NETHERLANDS

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Telephone +31-20-5803911  
Telex 18582 - HR. NR. 158992 Amsterdam

Aloha,



Dennis J. Russell  
P.O. Box 655  
Mountlake Terrace, WA 98043

10/12

Colonization and  
utilization of the alien marine  
alga Hypnea musciformis in  
the Hawaiian Islands.

Dear George,  
I just found in your letter the date of the collection of the alga. This is just a preliminary assessment, but as an existing form, the alga is probably introduced somewhere, to the Hawaiian Islands. I am sure that you have the alga in your collection. I am sure that you have the alga in your collection. I am sure that you have the alga in your collection.

The reason I am writing you is to get more information on the exact location where the alga was found. The name is on my list, Hypnea musciformis. Please send me the exact location of the alga if you can and maybe David's address and/or phone number. The address plates were still there and contained photographs, so it was probably taken just prior to the alga's death.

I don't know what will come of this, but my ears perk-up whenever I hear that an alien species may be involved.

The address for Pacific Science is:

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Alone



George A. Maxwell  
P.O. Box 181  
1000 S. Berkeleys  
Berkeley, California



Algae identification by (D. J. Russell, 21 June 1993)

Samples sent to me on 23 April 1993, your list is attached

1. 07/01/92 Kaneohe Bay (Kahaluu), Frank Viterise, forestomach contents, tumors

<u>Acanthophora spicifera</u>	99%
<u>Halophila hawaiiiana</u>	1
<u>Dictyota acuteloba</u>	Trace
<u>Halimeda discoidea</u>	Trace
<u>Spyridia filamentosa</u>	Trace

2. 07/14/92 Midway Atoll, Don Williamson, forestomach contents, no tumors

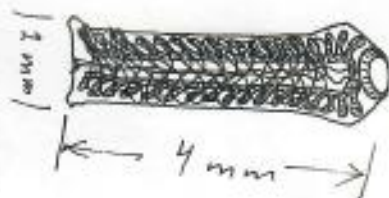
<u>Spyridia filamentosa</u>	100%
<u>Dictyota friabilis</u>	Trace
<u>Sphacelaria</u> sp.	Trace

Casurina equisetifolia Trace  
(tree foliage)

One flat-worm (leech or fluke?)  
(I stained it blue and returned it to the sample vial)

3. 09/15/92 Kaneohe Bay, Blanche McCabe, stomach contents, tumors

<u>Hypnea musciformis</u>	60%
<u>Sargassum echinocarpum</u>	20
<u>Amansia glomerata</u>	10
<u>Codium arabicum</u>	5
<u>Dictyosphaeria cavernosa</u>	5
<u>Acanthophora spicifera</u>	Trace
<u>Ceramium</u> sp.	Trace
<u>Polysiphonia howei</u>	Trace



4. 09/25/92 Kahana Beach, no tumors, forestomach sample, SL-40.0, sample #1, Skippy Hau

<u>Pterocladia capillacea</u>	100%
<u>Gracilaria coronopifolia</u>	Trace
<u>Hypnea musciformis</u>	Trace

5. 09/25/92 Kahana Beach, no tumors, forestomach sample, SL 40.4, sample #2, Skippy Hau (DLNR - Maui)

<u>Pterocladia capillacea</u>	99%
<u>Gracilaria coronopifolia</u>	1
<u>Acanthophora spicifera</u>	Trace
<u>Lyngbya</u> sp.	Trace



6. 09/26/92 Kailua Beach, no tumors, forestomach sample,  
Michael Moore

<u>Acanthophora spicifera</u>	90%
<u>Pterocladia capillacea</u>	10
<u>Boodlea composita</u>	Trace
<u>Dictyota crenulata</u>	Trace
Colonial tunicate	Trace

7. 09/26/92 Kailua Beach, forestomach contents, no tumors,  
Belluche / Ellis

<u>Acanthophora spicifera</u>	90%
<u>Laurencia nidifica</u>	4
<u>Hypnea musciformis</u>	3
<u>Dictyota crenulata</u>	1
<u>Pterocladia capillacea</u>	1
<u>Champia parvula</u>	Trace
<u>Dictyosphaeria versluysii</u>	Trace
<u>Hypnea nidifica</u>	Trace
Colonial tunicate	1

8. 09/29/92 Kiholo, fecal pellet

<u>Hypnea musciformis</u>	50%
<u>Pterocladia capillacea</u>	40
<u>Amansia glomerata</u>	10
<u>Gelidium sp.</u>	Trace
<u>Sargassum sp.</u>	Trace
<u>Sphacelaria sp.</u>	Trace

9. 10/01/92 Laie (Hukilau Beach) stomach contents, tumors,  
Officer Shannon Kawakani

<u>Codium arabicum</u>	70%
<u>Codium edule</u>	20
<u>Amansia glomerata</u>	5
<u>Gelidium sp.</u>	3
<u>Dictyosphaeria versluysii</u>	1
<u>Laurencia nidifica</u>	1
<u>Acanthophora spicifera</u>	Trace
<u>Cladophoropsis luxurians</u>	Trace
<u>Lyngbya majuscula</u>	Trace

10. 10/05/92 Haleiwa (Alii Beach Park), forestomach sample,  
no tumors, Bill Taylor

<u>Pterocladia capillacea</u>	60%
<u>Acanthophora spicifera</u>	35
<u>Gracilaria coronopifolia</u>	5
<u>Boodlea composita</u>	Trace
<u>Dictyota crenulata</u>	Trace
<u>Hypnea musciformis</u>	Trace
<u>Laurencia nidifica</u>	Trace
<u>Padina japonica</u>	Trace
<u>Spyridia filamentosa</u>	Trace
<u>Valonia aegagropila</u>	Trace

11. 10/06/92 Kapalua Bay, forestomach sample, no tumors,  
Brooks Tamaye (DLNR - Maui)

<u>Pterocladia capillacea</u>	100%
<u>Acanthophora spicifera</u>	Trace
<u>Dictyota friabilis</u>	Trace
<u>Valonia aegagropila</u>	Trace

12. 10/06/92 Hauola, Lanai, forestomach contents, no tumors,  
Albert Morita

<u>Acanthophora spicifera</u>	40%
<u>Amansia glomerata</u>	25
<u>Schizothrix calcicola</u>	25
<u>Hypnea musciformis</u>	5
<u>Laurencia nidifica</u>	5
<u>Dictyosphaeria versluysii</u>	Trace
<u>Jania sp.</u>	Trace
<u>Laurencia sp.</u>	Trace
<u>Sargassum echinocarpum</u>	Trace

13. 10/06/92 Kualoa #1, fecal pellet

<u>Codium edule</u>	80
<u>Amansia glomerata</u>	10
<u>Sargassum sp.</u>	10
<u>Lyngbya semiplena</u>	Trace

14. 10/06/92 Kualoa #2, fecal pellet

<u>Amansia glomerata</u>	80%
<u>Codium sp.</u>	20
<u>Cladophoropsis luxurians</u>	Trace
<u>Sphacelaria furcigera</u>	Trace

Bryozoan	Trace
Sponge	Trace
Plant fibers	Trace

15. 10/09/92 Kaneohe Bay, (Kualoa Beach Park), forestomach  
sample, tumors, Mark Wilkerson

<u>Dictyosphaeria cavernosa</u>	30%
<u>Acanthophora spicifera</u>	20
<u>Codium edule</u>	20
<u>Hypnea musciformis</u>	20
<u>Sargassum polyphyllum</u>	10
<u>Bryopsis pennata</u>	Trace
<u>Dictyosphaeria versluysii</u>	Trace
<u>Dictyota sp.</u>	Trace
<u>Halimeda discoidea</u>	Trace
<u>Laurencia nidifica</u>	Trace
<u>Lyngbya majuscula</u>	Trace
<u>Valonia aegagropila</u>	Trace

Animal sponge (1 cc lump)

16. 10/16/92 Kailua, forestomach contents, no tumors, Lee File

<u>Codium phasmaticum</u>	50%
<u>Acanthophora spicifera</u>	25
<u>Hypnea musciformis</u>	25
<u>Ceramium sp.</u>	Trace
<u>Cladophora sp.</u>	Trace
<u>Dictyota divaricata</u>	Trace
<u>Halimeda discoidea</u>	Trace
<u>Laurencia nidifica</u>	Trace
<u>Lobophora variegata</u>	Trace
<u>Padina japonica</u>	Trace
<u>Siphonocladus tropicus</u>	Trace
<u>Spyridia filamentosa</u>	Trace

One micromollusc bivalve pieces

17. 10/18/92 Fort Derussy, stomach sample, water safety division

<u>Hypnea musciformis</u>	40%
<u>Acanthophora spicifera</u>	30
<u>Laurencia nidifica</u>	10
<u>Padina japonica</u>	10
<u>Sargassum echinocarpum</u>	10
<u>Ceramium sp.</u>	Trace
<u>Dictyota acuteloba</u>	Trace
<u>Halophila hawaiiiana</u>	Trace

18. 10/19/92 Malika Bay, stomach contents, no tumors, Skippy Hau

<u>Pterocladia capillacea</u>	100%
<u>Hypnea sp.</u>	Trace

19. 10/28/92 Kaneohe Bay (KMCAS), stomach sample, no tumors, Norman Chun

<u>Acanthophora spicifera</u>	50%
<u>Laurencia obtusa</u>	20
<u>Laurencia nidifica</u>	20
<u>Dictyosphaeria cavernosa</u>	10
<u>Ceramium sp.</u>	Trace
<u>Dictyota friabilis</u>	Trace
<u>Lyngbya sp.</u>	Trace
<u>Polysiphonia sp.</u>	Trace

20. 10/28/92 Kaneohe Bay (KMCAS), intestine contents, no tumors, Norman Chun

<u>Gracilaria salicornia</u>	85%
<u>Halophila hawaiiiana</u>	10
<u>Acanthophora spicifera</u>	3
<u>Hypnea musciformis</u>	2



21. 10/29/92 Heeia Kea Boat Harbor, stomach sample, Earl Omoto

<u>Hypnea musciformis</u>	98%
<u>Laurencia nidifica</u>	1
<u>Sargassum echinocarpum</u>	1
<u>Champia parvula</u>	Trace
<u>Halimeda sp.</u>	Trace

22. 11/08/92 Kailua, forestomach, no tumors, Larry Valdez

<u>Acanthophora spicifera</u>	80%
<u>Sargassum echinocarpum</u>	10
<u>Gelidium sp.</u>	5
<u>Halimeda discoidea</u>	5
<u>Bryopsis sp.</u>	Trace
<u>Codium edule</u>	Trace
<u>Dictyosphaeria versluysii</u>	Trace
<u>Hypnea musciformis</u>	Trace
<u>Spvridia filamentosa</u>	Trace
<u>Colonial tunicate</u>	Trace

23. 11/11/92 Waialua, forestomach contents, tumors, Bradley Hara

<u>Amansia glomerata</u>	100%
<u>Pterocladia capillacea</u>	Trace
<u>Rhodymenia anastomosans</u>	Trace
<u>Tolypiocladia calodictyon</u>	Trace

24. 11/17/92 Spencer Beach Park (Big Island), forestomach contents, no tumors, Richard White

<u>Pterocladia capillacea</u>	99%
<u>Gelidium sp.</u>	1
<u>Centroceros clavulatum</u>	Trace
<u>Microdictyon sp.</u>	Trace
<u>Hypnea pannosa</u>	Trace

25. 11/17/92 Spencer Beach Park (Big Island), second stomach contents, no tumors, Richard White

<u>Amansia glomerata</u>	99%
<u>Hypnea sp.</u>	1
<u>Laurencia sp.</u>	Trace

26. 11/24/92 Wailua, forestomach contents, no tumors, Bradley Hara.

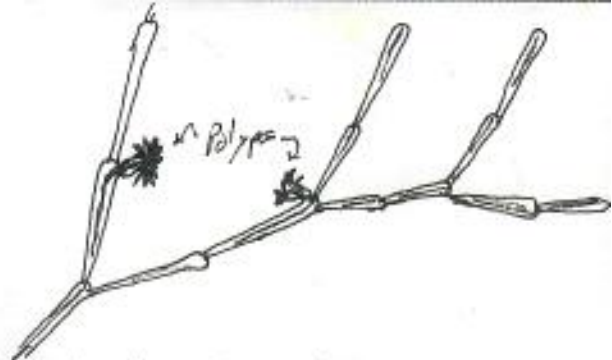
<u>Amansia glomerata</u>	60%
<u>Pterocladia capillacea</u>	40
<u>Acanthophora spicifera</u>	Trace
<u>Codium edule</u>	Trace
<u>Dictyota friabilis</u>	Trace



27. 11/25/92 Hanauma Bay, F16, mouth

Amansia glomerata 100%  
Ceramium sp. Trace

Bryozoan? Hydrozoan? ----->

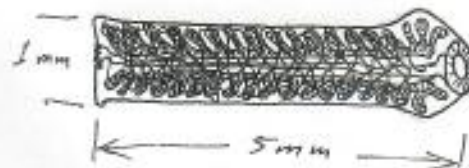


28. 11/30/90 Kaneohe Bay (Kualoa-White Sands), forestomach, tumors, Mark Thomas

Acanthophora spicifera 70%  
Laurencia nidifica 20  
Gracilaria coronopifolia 10  
Bryopsis sp. Trace  
Dictyota acuteloba Trace

29. 11/30/92 Anaehoomalu (Big Island), forestomach contents, no tumors, James Kaulukukui (Docare)

Pterocladia sp. 50%  
Gelidium sp. 50  
Amansia glomerata Trace  
Cladophoropsis sp. Trace  
Dictyota friabilis Trace



Flatworm (leech or fluke?). I stained it blue so it would be easy to find in the sample and returned it to the vial.

30. 12/05/92 Kaneohe Bay (Kahaluu), forestomach contents, tumors, Craig Nakamura

Acanthophora spicifera 100%  
Bryopsis sp. Trace  
Gracilaria sp. Trace  
Spyridia filamenta Trace

31. 12/06/92 Wailua, forestomach contents, tumors, Steve Struckman

Amansia glomerata 100%  
Ceramium sp. Trace  
Terrestrial plant fibers Trace

32. 01/18/93 Kahua Point, Lanai, forestomach contents, no tumors, Albert Morita

Pterocladia capillacea 90%  
Dasya pedicellata 5  
Laurencia nidifica 5  
Dictyosphaeria versluysii Trace  
Valonia aegagropila Trace

33. 01/21/93 Erctmochelys imbricata (Hawksbill) Recovered from gill net, Kahului Harbor, Maui, revived turtle. tagged, released 1/22/93, feces sample, Skippy Hau

3 octopus mouth parts (beaks)  
Gooseneck barnacle shells (Lepas)  
Mass of strong fine fibers (look like synthetic fibers, not plant material or animal tissue material)

34. 01/21/93 Heeia Kea, Kaneohe Bay, Earl Omoto, stomach contents

<u>Hypnea musciformis</u>	45%
<u>Acanthophora spicifera</u>	45
<u>Codium</u> sp.	10
<u>Dictyota acuteloba</u>	Trace
<u>Gelidium</u> sp. (?)	Trace
<u>Halophila hawaiiiana</u>	Trace
<u>Hypnea cervicornis</u>	Trace

35. 01/26/93 Hickam AFB, Floyd Hustace, Stomach

<u>Pterocladia capillacea</u>	98%
<u>Codium</u> sp.	2
<u>Acanthophora spicifera</u>	Trace
<u>Dictyota acuteloba</u>	Trace
<u>Sargassum</u> sp.	Trace
<u>Lobopora variegata</u>	Trace
terrestrial plant fibers (grass)	Trace

36. 02/02/93 Hilo Bay (Big Island), forestomach, tumors, David Frenz

Seagrass species (What species?)	70%
<u>Pterocladia capillacea</u>	30

One black gastropod (Pipi), 5mm diameter

I sent the seagrass specimen to Dr. Ron Phillips for identification. He is a good friend of mine and knows the Hawaiian seagrasses well.

37. 02/17/93 Mokuleia Beach, forestomach contents, tumors, Darcy Kerrigan

<u>Pterocladia capillacea</u>	95%
<u>Amansia glomerata</u>	5
<u>Hypnea</u> sp.	Trace

38. 02/21/93 Camp Mokuleia, forestomach contents, no tumors, Greta

<u>Codium arabicum</u>	25%
<u>Codium edule</u>	25
<u>Acanthophora spicifera</u>	20
<u>Pterocladia capillacea</u>	20
<u>Hypnea musciformis</u>	10
<u>Dictyota acuteloba</u>	Trace
<u>Gracilaria coronopifolia</u>	Trace
<u>Jania capillacea</u>	Trace

39. 02/24/93 Barber's Point NAS, forestomach, tumor, Terri Lambert

<u>Codium edule</u>	70%
<u>Pterocladia capillacea</u>	20
<u>Codium reediae</u>	5
<u>Hypnea musciformis</u>	5
<u>Acanthophora spicifera</u>	Trace

40. 02/26/93 (Makaha) HI Princess Hotel, forestomach contents, no tumors

<u>Codium edule</u>	70%
<u>Amansia glomerata</u>	20
<u>Pterocladia sp.</u>	10
<u>Spyridia filamentosa</u>	Trace

41. 02/27/93 Kaneohe Bay (Kahaluu), forestomach contents, tumors, Sam Morales

<u>Hypnea musciformis</u>	90%
<u>Dictyosphaeria cavernosa</u>	10
<u>Dictyota acuteloba</u>	Trace
<u>Sargassum sp.</u>	Trace

Small (1 cm<sup>2</sup>), thin, clear plastic pieces, like saran wrap (?)

42. 03/08/93 Kaneohe Bay (Kauhale Beach Cove), forestomach contents, tumors, Kim Slagel

<u>Halophila hawaiiensis</u>	50%
<u>Dictyosphaeria cavernosa</u>	45
<u>Gracilaria salicornia</u>	5

3 lumps (2x2x1 cm) colonial ascidians  
Sponge (1x2x1 cm)

43. 03/10/93 Maunaloa Bay, forestomach contents, tumors, Liz Hawkins

<u>Acanthophora spicifera</u>	90%
<u>Hypnea musciformis</u>	10
<u>Dictyota sp.</u>	Trace
<u>Laurencia nidifica</u>	Trace

44. 03/24/93 Maalaea Bay, Maui, forestomach contents, no tumors, Brooks Tamaye

<u>Pterocladia capillacea</u>	90%
<u>Hypnea musciformis</u>	10
<u>Acanthophora spicifera</u>	Trace
<u>Ulva fasciata</u>	Trace



45. 03/25/93 Hawaii Kai Marina (Maunalua Bay), stomach contents, tumors, Skip Tracy

<u>Codium edule</u>	95%
<u>Dictyosphaeria cavernosa</u>	5
<u>Amansia glomerata</u>	Trace
<u>Cladophora</u> sp.	Trace
<u>Dictyosphaeria cavernosa</u>	Trace

46. 03/29/93 Lahaina, Maui, Manaka'o'o Beach Park, forestomach contents, no tumors, Brooks Tamaye (DLNR-Maui)

<u>Amansia glomerata</u>	90%
<u>Hypnea musciformis</u>	5
<u>Spyridia filamentosa</u>	5
<u>Ceramium</u> spp.	Trace
<u>Griffithsia</u> sp.	Trace
<u>Leviellia jungermannioides</u>	Trace

47. 03/31/93 Kaneohe Bay (Kahaluu), forestomach contents, tumors, Larry Lopez

<u>Hypnea musciformis</u>	50%
<u>Dictyosphaeria cavernosa</u>	45
<u>Gracilaria salicornia</u>	5
<u>Halimeda discoidea</u>	Trace

Sponge (1x3x1 cm) plus other smaller pieces

48. 04/03/93 Kahana Bay, forestomach contents, unknown tumors, J. Robvello (Docare) via Chad (SSg)

<u>Acanthophora spicifera</u>	50%
<u>Laurencia nidifica</u>	30
<u>Codium edule</u>	10
<u>Hypnea musciformis</u>	10
<u>Cladophora</u> sp.	Trace
<u>Gelidium</u> sp.	Trace
<u>Sargassum echinocarpum</u>	Trace

49. 04/13/92 Mauna Lani (Big Island), forestomach contents, no tumors, Dan Akaka

<u>Pterocladia</u> sp.	100%
<u>Cladophoropsis luxurians</u>	Trace
<u>Dictyota</u> sp.	Trace
<u>Turbinaria ornata</u>	Trace

50. 04/15/93 Kailua Bay, forestomach contents, undertermined tumors, Richard Taylor

<u>Laurencia nidifica</u>	40%
<u>Hypnea musciformis</u>	35
<u>Gracilaria coronopifolia</u>	30
<u>Codium edule</u>	10
<u>Champia parvula</u>	5

(continued)

<u>Acanthophora spicifera</u>	Trace
<u>Ceramium sp.</u>	Trace
<u>Dictyota acuteloba</u>	Trace
<u>Halimeda discoidea</u>	Trace
<u>Hypnea nidifica</u>	Trace
<u>Lynghya majuscula</u>	Trace

51. 04/16/93 Barber's Point NAS, forestomach contents, no tumors, Debbie Acheta

<u>Pterocladia capillacea</u>	70%
<u>Codium edule</u>	30

#### LIST OF SPECIES IN THE 23 APRIL 1993 SAMPLES

##### RHODOPHYTA

Acanthophora spicifera (Vahl) Boerg.  
Amansia glomerata C. Ag.  
Centroceros clavulatum (C. Ag.) Harvey  
Ceramium sp.  
Champia parvula (C. Ag.) Harvey  
Dasya pedicellata (C. Ag.) C. Ag.  
Gelidium sp.  
Gracilaria coronopifolia J. Ag.  
Gracilaria salicornia C. Ag.  
Griffithsia sp.  
Hypnea cervicornis J. Ag.  
Hypnea musciformis (Wulfen) C. Ag.  
Hypnea nidifica J. Ag.  
Hypnea pannosa J. Ag.  
Hypnea sp.  
Jania capillacea Harvey  
Jania sp.  
Laurencia nidifica J. Ag.  
Laurencia obtusa (Huds.) Lam.  
Laurencia sp.  
Leviellea jungermannioides Harv.  
Polysiphonia howei Hollenberg  
Polysiphonia sp.  
Pterocladia capillacea (Gmelin) Bornet  
Pterocladia sp.  
Rhodymenia anastomosans Weber van Bosse  
Spyridia filamentosa (Wulfen) Harvey  
Tolypiocladia calodictyon (Harv.) Silva

##### PHAEOPHYTA

Lobophora variegata (Lamx.) Womersley  
Dictyota acuteloba J. Ag.  
Dictyota crenulata J. Ag.  
Dictyota divaricata Lamouroux  
Dictyota friabilis Setchell  
Dictyota sp.  
Lobophora variegata (Lamx.) Womersley  
Padina japonica Yamada

(continued)

Sargassum echinocarpum J. Ag.  
Sargassum polyphyllum J. Ag.  
Sargassum sp.  
Sphacelaria furcigera Kützing  
Sphacelaria sp.  
Turbinaria ornata (Turn.) J. Ag.

#### CHLOROPHYTA

Boodlea composita (Harvey) Brand  
Bryopsis pennata Lamx.  
Bryopsis sp.  
Cladophora sp.  
Cladophoropsis luxurians Gilbert  
Cladophoropsis sp.  
Codium arabicum Kützing  
Codium edule Silva  
Codium phasmaticum Setchell  
Codium reediae Silva  
Codium sp.  
Dictyosphaeria cavernosa (Forsskal) Boerg.  
Dictyosphaeria versluysii Weber Van Bosse  
Halimeda discoidea Decaisne  
Halimeda sp.  
Microdictyon sp.  
Siphonocladus tropicus (Crouan) J. Ag.  
Ulva fasciata Delile  
Valonia aegagropila C. Ag.

#### SEAGRASS

Halophila hawaiiiana  
New seagrass species record for Hawaii (name?). Sample sent to R. C. Phillips for identification (27 June 1993).

#### CYANOPHYTA

Lyngbya majuscula Gomont  
Lyngbya semiplena (C. Ag.) J. Ag.  
Lyngbya sp.  
Schizothrix calcicola (Ag.) Gomont

#### TERRESTRIAL PLANTS

Casurina equisetifolia L.



**51** ALGAE SAMPLES COLLECTED FROM NECROPSIED GREEN TURTLES *Submitted*  
 MARINE TURTLE RESEARCH PROGRAM, N M F S *4/23/93*

( - Identification on Samples - )

NAME	DATE	LOCATION	SAMPLE SITE
✓ 1. Frank Viterise	7-1-92	K-Bay/Kahaluu	Forestomach
✓ 2. Don Williamson	7-14-92	Midway Atoll	Forestomach
✓ 3. Blanche McCabe	9-15-92	Kaneohe Bay	Stomach
✓ 4. Skippy Hau	9-25-92	Kahana Beach/Maui	Forestomach #1
✓ 5. Skippy Hau	9-25-92	Kahana Beach/Maui	Forestomach #2
✓ 6. Michael Moore	9-26-92	Kailua Beach	Forestomach
✓ 7. Belluche & Ellis	9-26-92	Kailua Beach	Forestomach
✓ 8. Kiholo	9-29-92	Kiholo	Fecal Pellet
✓ 9. Shannon Kawakami	10-1-92	Hukilau Beach/Laie	Stomach
✓ 10. Bill Taylor	10-5-92	Haleiwa; Alii B.P.	Forestomach
✓ 11. Brooks Tamaye	10-6-92	Kapalua Bay/Maui	Forestomach
✓ 12. Albert Morita	10-6-92	Hauola/Lanai	Forestomach
✓ 13. Kualoa #1	10-6-92	Kualoa	Fecal Pellet
✓ 14. Kualoa #2	10-6-92	Kualoa	Fecal Pellet
✓ 15. Mark Wilkerson	10-9-92	Kualoa Ranch	Forestomach
✓ 16. Lee File	10-16-92	Kailua	Forestomach
✓ 17. Water Safety Div.	10-18-92	Ft. DeRussy	Forestomach
✓ 18. Skippy Hau	10-19-92	Maliko Bay/Maui	Stomach
✓ 19. Norman Chun	10-28-92	K-Bay; KMCAS	Stomach
✓ 20. Norman Chun	10-28-92	K-Bay; KMCAS	Intestine
✓ 21. Earl Omoto	10-29-92	Heeia Kea B.Ramp	Stomach
✓ 22. Larry Valdez	11-8-92	Kailua	Forestomach
✓ 23. Bradley Hara	11-11-92	Waialua	Forestomach
✓ 24. Richard White	11-17-92	Spencer B.Park/BigI	Forestomach

*Please return all samples.*

25	Richard White	11-17-92	Spencer B. Park/Big I	Second stomach
26	Bradley Hara	11-24-92	Waialua	Forestomach
27	Tag # F16	11-25-92	Hanauma Bay	Mouth
28	Mark Thomas	11-30-92	Kualoa/White Sands	Forestomach
29	James Kaulukukui	11-30-92	Anaehoomalu Bay/Big I	Forestomach
30	Craig Nakamura	12-5-92	K-Bay/Kahaluu	Forestomach
31	Steve Struckman	12-6-92	Waialua	Forestomach
32	Albert Morita	1-18-93	Kahua Point/Lanai	Forestomach
33	Skippy Hau	1-21-93	Kahului Harb/Maui	Hksbill feces
34	Earl Omoto	1-21-93	K-Bay	Stomach
35	Floyd Hustace	1-26-93	Hickam A.F.B.	Stomach
36	David Frenz <i>Sea Grant</i>	2-2-93	Hilo Bay/Big Island	Forestomach
37	Darcy Kerrigan	2-17-93	Mokuleia Beach	Forestomach
38	Greta	2-21-93	Camp Mokuleia	Forestomach
39	Terri Lambert	2-24-93	Barberts Point NAS	Forestomach
40	Andy J. Brown	2-26-93	Makaha	Forestomach
41	Sam Morales	2-27-93	K-Bay/Kahaluu	Forestomach
42	Kim Slagel	3-8-93	K-Bay/Kauhale Bch	Forestomach
43	Liz Hawkins	3-10-93	Maunalua Bay	Forestomach
44	Brooks Tamaye	3-24-93	Maalaea Bay/Maui	Forestomach
45	Skip Tracy	3-25-93	Hawaii Kai Marina	Stomach
46	Brooks Tamaye	3-29-93	Lahaina/Maui	Forestomach
47	Larry Lopez	3-31-93	K-Bay/Kahaluu	Forestomach
48	J. Robello (SSG)	4-3-93	Kahana Bay	Forestomach
49	Dan Akaka	4-13-93	Mauna Lani/Big Is	Forestomach
50	Richard Taylor	4-15-93	Kailua Bay	Forestomach
51	Debbie Ancheta	4-16-93	Barbers Pt. NAS	Forestomach

Please return all samples



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33 ALGAE SAMPLES COLLECTED FROM NECROPSIED GREEN TURTLES  
MARINE TURTLE RESEARCH PROGRAM, N M F S  
Submitted to Dr. Russell on 5-13-94

( - Identification on Samples - )

NAME	DATE	LOCATION	SAMPLE SITE
✓ Tag 5275 & 3784	6-25-91	Laysan Island	Stomach only
✓ Susan Medeiros SSG	4-24-93	K-Bay; Kahaluu	Forestomach
✓ Steve Evans SSG	4-24-93	Heeia Kea B. H.	Stomach
✓ Mrs. George Akau	4-24-93	Kekela Bay	Stomach
✓ Russ Miya	4-29-93B	Kaneohe Bay (Molii)	Forestomach
✓ Brooks Tamaye	4-30-93	Kahului Bay, Maui	Upper stomach
Missing ✓ Wayne German	5-2-93	Kaneohe Bay	Forestomach
✓ George Balazs	5-12-93	McGregor Point/Maui Mouth	
✓ Karen Muth	5-17-93	Malaekahana B. Park	Forestomach
✓ Annie Silva	5-24-93	Reef Runway S. Oahu	Forestomach
✓ Heather Newman SSG	6-6-93	Waialua Beach	Forestomach
✓ Skip Tracy SSG	6-19-93	Hawaii Kai Marina	Forestomach
✓ Skippy Hau	6-21-93	Kahului Harbor/Maui	Forestomach
✓ Kerry Yasui	6-29-93	Waikiki	Forestomach
✓ ID 11620	6-29-93	K-Bay	Mouth
✓ Mr Kadekawa	7-7-93	Lahilahi Pt	Forestomach
✓ Valerie Campbell	7-27-93	Camp Erdman, Waialua	Forestomach
✓ R. Miya	7-29-93	Honokowai, Maui	Fecal Pellet
✓ SSG-Ray Boland	7-30-93	Kawela Bay	Forestomach
✓ Frances Ring	7-31-93	Waialua	Forestomach
✓ Gerry Villalobos	8-20-93	Barbers Pt Harbor	Forestomach
✓ Jay Kegley	8-24-93	Kahului Break/Maui	Forestomach
✓ Mrs Davis	8-27-93	Makapuu Beach Park	Forestomach



NAME	DATE	LOCATION	SAMPLE SITE
✓✓ HPD Off D Vollrath	9-6-93	Kaika St Rec park	Forestomach
✓✓ Terrance/Chad-SSG	9-11-93	Makaha Beach Park	Forestomach
✓✓ Brandon Hillis	9-15-93	Kawainui Canal	Forestomach
✓✓ Al Rogers	9-16-93	Kahana Bay B.P.	Forestomach
✓✓ Calvin Ah Loy	9-17-93	Baldwin B.P./Maui	Forestomach
✓✓ Annette Talamoa	9-23-93	Barbers Point NAS	Forestomach
✓✓ Brenda/Ray Boland	9-27-93	Kahaluu Beach	Forestomach
✓✓ Jose Badis	9-28-93	Makaha Beach Park	Forestomach
✓✓ Jose Badis	9-28-93	Makaha Beach Park	2nd Stomach
✓✓ SSG / Chad	10-2-93	Kahuku side of sharks cove	Forestomach
✓✓ William Stern	10-3-93B	Kualoa	Forestomach

34 ALGAE SAMPLES COLLECTED FROM GREEN SEA TURTLES  
 MARINE TURTLE RESEARCH PROGRAM, N M F S  
 SUBMITTED TO DR. RUSSELL ON 5-13-94

NAME	DATE	LOCATION	SAMPLE SITE
✓ DENNIS PESCH	10-8-93	SUNSET BEACH	FORESTOMACH
✓ GEORGE COOK/HPD	10-9-93	MOKULEIA BEACH	FORESTOMACH
✓ VERTA BETANCOURT	10-13-93	CAMP MOKULEIA	FORESTOMACH
✓ MARK MORGAN	10-21-93	WEST LOCH	FORESTOMACH
✓ GARY ROPERT	10-23-93	HALEIWA	FORESTOMACH
✓ BECKY DUNNING	10-31-93	LAENANI BCH PARK	FORESTOMACH
✓ MR. MATO	11-3-93	HICKAM AFB	FORESTOMACH
✓ DENNIS TOBA	11-5-93	WAIALEE BEACH	STOMACH
✓ PAT VIA PAO(T. SHEARER)	11-13-93	KUALOA BCH PARK	FORESTOMACH
✓ DOCARE	11-14-93	KAILUA	FORESTOMACH
✓ ERNIE REESE	11-20-93	KANEOHE BAY/WAIKANE	FORESTOMACH
✓ PABLO BUCKINGHAM	12-1-93	MALAEKAHANA BCH PARK	STOMACH
✓ JOHN S. FAIRIS via MIKE SILBERNAGLE(USFWS)	12-2-93	HALEIWA BCH PARK	STOMACH
✓ BILL KUAMOO	12-13-93	HAUULA	FORESTOMACH
✓ PAUL SCHUFT	12-13-93	WAIALUA	FORESTOMACH
✓ RON JACKSON	12-17-93	BARBER'S PT. NAS	FORESTOMACH
✓ PORT CAPT. P.J. SAXTON	1-3-94	KANEOHE BAY YACHT CLUB	STOMACH
✓ JOANNE PETTIGREW	1-12-94	HALEIWA	FORESTOMACH
✓ TERRY GAETA	1-13-94	IROQUOIS PT.	FORESTOMACH
✓ DOCARE via CYNTHIA VANDERLIP	1-17-94	KAILUA BEACH	STOMACH
✓ BARBARA HUDGINS	2-3-94	KAILUA BAY (CASTLE PT.)	FORESTOMACH

✓ DOCARE	3-5-94	ALA MOANA BCH PARK	FORESTOMACH
✓ BOB MONCRIEF	3-6-94	KAILUA BAY	FORESTOMACH
✓ JACKLYN BOYER	3-9-94	KAILUA BEACH	FORESTOMACH
✓ AL ROGERS	3-14-94	KAHANA BAY	FORESTOMACH
✓ ANONYMOUS via SEA LIFE PK	3-16-94	WAIMANALO BCH PARK	FORESTOMACH
✓ JACOB CHUN	3-24-94	KANEOHE BAY	FORESTOMACH
✓ STEVE STRUCKMAN	4-10-94	WAIALUA	FORESTOMACH
✓ JERRY KERMODE	4-11-94	POUNDER'S BEACH	STOMACH
✓ MARK HECKMAN	4-13-94	WAIKIKI	FORESTOMACH
✓ MERLIN OKADA	4-19-94	KANEOHE BAY	FORESTOMACH
✓ BILL KUAMOO	4-22-94	PUNALUU	FORESTOMACH
✓ FLORIDA GREEN TURTLE	5-3-94	FLORIDA	SECRETORY CONTENTS
✓ FLORIDA GREEN TURTLE	5-3-94	FLORIDA	ESOPHAGUS CONTENTS



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Algae Sample Identifications from Necropsied Green Turtles

6-25-91 Tag 5275 & 3784 Laysan Island, stomach, necropsy T-01LA91

<u>Ulva</u> sp.	90%
<u>Turbinaria ornata</u>	5
<u>Hypnea cervicornis</u>	3
<u>Microdictyon japonicum</u>	2
<u>Halimeda</u> sp.	Trace

Sponge

4-24-93 Kaneohe Bay (Kahaluu), Susan Medeiros via Tori (SSG), no tumor, forestomach

<u>Kappaphycus striatum</u>	50%
<u>Hypnea musciformis</u>	30
<u>Dictyosphaeria cavernosa</u>	Trace
<u>Dictyota</u> sp.	Trace
<u>Halophila hawaiiiana</u>	Trace
<u>Sargassum</u> sp.	Trace

Sponge (white masses)

Sponge (red masses)

Shrimp chela

4-24-93 Heeia Kea Boat Harbor, Steve Evens via Tori (SSG), no tumors, stomach

<u>Dictyosphaeria cavernosa</u>	100%
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4-24-93 Kekela Bay, Mrs. George Akau, no tumors, stomach

<u>Amansia glomerata</u>	90%
<u>Spyridia filamentosa</u>	10
<u>Gelidium</u> sp.	Trace

4-29-93 Kaneohe Bay, (sandbar adjacent to Mohi Pond), Russ Miya, forestomach

<u>Acanthophora spicifera</u>	90%
<u>Hypnea musciformis</u>	5
Hollow flat branched red (?)	5

4-30-93 Kahului Bay, Maui, Brooks Tamaye, upper stomach

<u>Ulva fasciata</u>	100%
<u>Acanthophora spicifera</u>	Trace
<u>Hypnea musciformis</u>	Trace

5-2-93 Kaneohe Bay, forestomach

5-12-93 McGregor Pt., Maui, G. Balazs, Mouth

<u>Acanthophora spicifera</u>	100%
<u>Hypnea sp.</u>	Trace

5-17-93 Malaekahana Beach Park, Karen Muth, forestomach, no tumor

<u>Codium arabicum</u>	40%
<u>Codium edule</u>	40
<u>Amansia glomerata</u>	10
<u>Rhodymenia anastomosans</u>	10
<u>Halophila hawaiiiana</u>	Trace

5-24-93 Reef Runway, Annie Silva, forestomach, no tumor

<u>Halophila hawaiiiana</u>	75%
<u>Hypnea musciformis</u>	15
<u>Codium edule</u>	5
<u>Gracilaria sp.</u>	5

Colonial ascidians (bulk of the material)

6-6-93 Wailua Beach, Heather Newman via Chad (SSG), forestomach, no tumor

<u>Pterocladia capillacea</u>	40%
<u>Amansia glomerata</u>	30
<u>Hypnea musciformis</u>	30

Black colonial ascidians



6-19-93 Hawaii Kai Marina, Skip Tracy via Tori (SSG), forestomach, tumors

<u>Amansia glommerata</u>	50%
<u>Hypnea musciformis</u>	30
<u>Acanthophora spicifera</u>	10
<u>Spyridia filamentosa</u>	10
<u>Codium edule</u>	Trace
<u>Dictyota acuteloba</u>	Trace

6-21-93 Kahului Harbor, Maui, Skippy Hau, forestomach, tumors

<u>Ulva fasciata</u>	90%
<u>Amansia glomerata</u>	10
<u>Acanthophora spicifera</u>	Trace
<u>Hypnea musciformis</u>	Trace

9-29-93 Waikiki, Kerry Yasui via Chad Yoshinago (SSG), forestomach, no tumor

<u>Gelidium sp.</u>	90%
<u>Acanthophora spicifera</u>	5
<u>Amansia glomerata</u>	5

6-29-93 Kaneohe Bay, 11620 Alg. ID, G. Balazs, mouth

<u>Acanthophora spicifera</u>	75%
<u>Halophila hawaiiiana</u>	25

7-7-93 Lahilahi Point, Mr. Kadekawa, forestomach, no tumor

<u>Codium edule</u>	50%
<u>Pterocladia capillacea</u>	30
<u>Ulva fasciata</u>	20

7-27-93 Camp Erdman Waialua, Valerie Campbell, forestomach, no tumor

<u>Hypnea musciformis</u>	80%
<u>Acanthophora spicifera</u>	10
<u>Ulva fasciata</u>	10
<u>Amansia glomerata</u>	Trace
<u>Codium edule</u>	Trace
<u>Halymenia formosa</u>	Trace
<u>Sargassum polyphyllum</u>	Trace

7-29-93 Honokowai, Maui, R. Miya, fecal pellet

<u>Enteromorpha</u> sp.	100%
<u>Sphacelaria</u> sp.	Trace

Sponge spicules (most of the mass)

7-30-93 Kawela Bay, Ray Boland (SSG), forestomach,

<u>Amansia</u> glomerata	50%
<u>Codium</u> arabicum	50
<u>Codium</u> edule	Trace
<u>Dictyosphaeria</u> cavernosa	Trace
<u>Hypnea</u> musciformis	Trace

7-31-93 Waialua, Frances Ring, forestomach, no tumor

<u>Pterocladia</u> capillacea	100%
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8-20-93 Barber's Point Harbor, Gerry Villalobos, forestomach, no tumor

<u>Pterocladia</u> capillacea	90%
<u>Codium</u> edule	10

8-24-93 Kahului breakwater, Maui, Skippy Hau & Jay Kegley, forestomach

<u>Pterocladia</u> capillacea	99%
<u>Amansia</u> glomerata	1

8-27(21?)-93 Makapuu Beach Park, Davis / Off. Gouveia, forestomach, tumors

<u>Amansia</u> glomerata	70%
<u>Codium</u> edule	30
<u>Boodlea</u> composita	Trace

9-6-93 Kaika State Recreational Park, Haleiwa, HPD Off. D. Vollrath via Ray Boland (SSG), forestomach, tumors

<u>Ulva</u> fasciata	99%
<u>Pterocladia</u> capillacea	1
<u>Acanthophora</u> spicifera	Trace
<u>Cladophoropsis</u> sp.	Trace

Snail eggs

9-11-93 makaha Beach Park, Terrance (Docare) via Chad Yoshinaga (SSG), forestomach, no tumor

<u>Amansia glomerata</u>	50%
<u>Pterocladia capillacea</u>	50
<u>Rhodymenia anastomosans</u>	Trace

9-15-93 Kawainui Canal, Brandon Hillis, forestomach, tumors

<u>Acanthophora spicifera</u>	99%
<u>Hypnea cervicronis</u>	1
<u>Cladophoropsis sp.</u>	Trace
<u>Dictyota sp.</u>	Trace

9-16-93 Kahana Bay Beach park, Al Rogers, forestomach, tumors

<u>Gelidium sp.</u>	90%
<u>Codium edule</u>	10
<u>Actinotrichia fragilis</u>	Trace

9-17-93 Baldwin Beach Park, Maui, Calvin Ah Loy (Docare) via Brooks Tamake (Docare), forestomach, no tumor

<u>Pterocladia capillacea</u>	100%
<u>Hypnea musciformis</u>	Trace

9-23-93 Barber's Point, Annette Talamoa, forestomach, tumors

<u>Acanthophora spicifera</u>	75%
<u>Codium edule</u>	25

9-27-93 Kahaluu Beach, Brenda via Ray Boland (SSG), forestomach, tumors

<u>Hypnea musciformis</u>	50%
<u>Laurencia nidifica</u>	50
<u>Acanthophora spicifera</u>	Trace

9-28-93 Makaha Beach Park, Jose Badis, forestomach, no tumor

<u>Amansia glomerata</u>	90%
<u>Codium sp. (?) large utricles</u>	10
<u>Polysiphonia sp.</u>	Trace



9-28-93 Makaha Beach Park, Jose Badis, 2nd stomach, no tumors

<u>Codium</u> sp. ? (large utricles)	40%
<u>Halophila hawaiiiana</u>	30
<u>Amansia glomerata</u>	10
<u>Codium edule</u>	10
<u>Spyridia filamentosa</u>	10
<u>Halimeda discoidea</u>	Trace
<u>Sargassum echinocarpum</u>	Trace

10-2-93 Kahuku side of Shark's Cove, Chad Yoshinaga (SSG), forestomach

<u>Pterocladia capillacea</u>	99%
<u>Amansia glomerata</u>	1
<u>Dictyota acuteloba</u>	Trace
<u>Jania capillacea</u>	Trace

10-3-93 Kūaloa, William Stern via Chad Yoshina (SSG), forestomach, no tumor

<u>Hypnea musciformis</u>	90%
<u>Acanthophora spicifera</u>	5
<u>Codium edule</u>	5
<u>Laurencia nidifica</u>	Trace
<u>Sargassum</u> sp.	Trace

10-8-93 Sunset Beach, Dennis Pesch, forestomach, no tumor

<u>Gelidium</u> sp.	50%
<u>Codium edule</u>	40
<u>Amansia glomerata</u>	10
<u>Actinotrichia fragilis</u>	Trace
<u>Cladophoropsis luxuriens</u>	Trace
<u>Laurencia</u> sp.	Trace

10-9-93 Mokuleia Beach, George Cook/HPD Off. Smith via Jim McCallum, forestomach, no tumor

<u>Codium edule</u>	50%
<u>Acanthophora spicifera</u>	30
<u>Dictyosphaeria versluysii</u>	20
<u>Microdictyon japonica</u>	Trace

10-13-93 Camp Mokuleia, Verta Betancourt, forestomach, no tumor

<u>Pterocladia capillacea</u>	80%
<u>Acanthophora spicifera</u>	10
<u>Amansia glomerata</u>	10
<u>Cladophoropsis luxuriens</u>	Trace
<u>Codium edule</u>	Trace
<u>Gelidiopsis variabile</u>	Trace

Snail eggs

10-21-93 West Loch, Mark Morgan, forestomach, tumors

<u>Acanthophora spicifera</u>	90%
<u>Pterocladia sp.</u>	5
<u>Codium arabicum</u>	3
<u>Laurencia nidifica</u>	2

10-23-93 Haleiwa Beach Park, Gary Ropert via Tom Shearer, forestomach, tumors

<u>Pterocladia capillacea</u>	99%
<u>Hypnea musciformis</u>	1

10-31-93 Laenani Beach Park (Kahaluu), Becky Dunning via Tom Shearer (PAO), forestomach, tumors

<u>Acanthophora spicifera</u>	75%
<u>Gracilaria salicornia</u>	10
<u>Codium edule</u>	5
<u>Dictyosphaeria cavernosa</u>	5
<u>Halophila hawaiiiana</u>	5

11-3-93 Hickam AFB, Mr. Mato, forestomach, tumors

<u>Codium edule</u>	80%
<u>Amansia glomerata</u>	5
<u>Dictyosphaeria versluysii</u>	5
<u>Hypnea musciformis</u>	5
<u>Ulva fasciata</u>	5
<u>Acanthophora spicifera</u>	Trace

11-5-93 Waialeale Beach, Dennis Toba, stomach, unk. tumors

<u>Amansia glomerata</u>	80%
<u>Hypnea musciformis</u>	10
<u>Pterocladia capillacea</u>	5
<u>Ulva fasciata</u>	5

11-13-93 Kualoa Residential Park, Pat via Tom Shearer (PAO), forestomach, tumors

<u>Acanthophora spicifera</u>	90%
<u>Hypnea musciformis</u>	10
<u>Cladophora sp.</u>	Trace

11-14-93 Kailua, docare via Tom Shearer, forestomach, tumors

<u>Acanthophora spicifera</u>	95%
<u>Laurencia cartilaginea</u>	3
<u>Dictyosphaeria versluysii</u>	1
<u>Turbinaria ornata</u>	1

11-20-93 Kaneohe Bay (Waikane), Earnie Reese via Tom Shearer & Kevin Bussator, forestomach, no tumor

<u>Gelidium sp.</u>	80%
<u>Codium edule</u>	10
<u>Hypnea musciformis</u>	10
<u>Dictyosphaeria versluysii</u>	Trace
<u>Turbinaria ornata</u>	Trace

12-1-93 Malaekahana Beach Park, Pablo Buckingham, stomach, no tumor

<u>Sargassum polyphyllum</u>	99%
<u>Dictyosphaeria cavernosa</u>	1
<u>Acanthophora spicifera</u>	Trace

12-2-93 Haleiwa Beach Park, John Fairis via Mike Silbernagle (USFNS), 2nd stomach, tumors

<u>Amansia glomerata</u>	90%
<u>Acanthophora spicifera</u>	10
<u>Gelidium sp.</u>	Trace



12-13-93 Hauula, Bill Kuamoo, forestomach, unk. tumor

<u>Gelidium</u> sp.	90%
<u>Codium edule</u>	10
<u>Laurencia</u> sp.	Trace
<u>Sargassum echinocarpum</u>	Trace
<u>Zonaria</u> sp.	Trace

12-13-93 Waialua, Paul Schuft, forestomach, tumors

<u>Hypnea musciformis</u>	90%
<u>Amansia glomerata</u>	5
<u>Pterocladia capillacea</u>	5
<u>Jania capillacea</u>	Trace

Fly wing

12-17-93 Barber's Point, NAS, (Nimitz Beach), RM2 Ron Jackson, forestomach, no tumor

<u>Pterocladia capillacea</u>	90%
<u>Codium edule</u>	5
<u>Hypnea musciformis</u>	5
<u>Acanthophora spicifera</u>	Trace

1-3-94 Kaneohe Bay Yacht Club, Port Capt. P. J. Saxon, stomach, tumors

<u>Acanthophora spicifera</u>	90%
<u>Spyridia filamentosa</u>	10
<u>Kappaphycus striatum</u>	Trace
<u>Gracilaria</u> sp.	Trace
<u>Sargassum polyphyllum</u>	Trace

1-12-94 Haleiwa, Joanne Pettigrew, forestomach, no tumor

<u>Amansia glomerata</u>	90%
<u>Codium arabicum</u>	5
<u>Codium edule</u>	5
<u>Acanthophora spicifera</u>	Trace
<u>Pterocladia capillacea</u>	Trace

1-13-93 Iroquois Point, Terry Gaeta, forestomach, unk. tumors

<u>Codium edule</u>	90%
<u>Gelidium</u> sp.	Trace

1-17-94 Kailua Beach, Docare via Cynthia Vanderlip, stomach, tumors

<u>Acanthophora spicifera</u>	95%
<u>Hypnea musciformis</u>	5
<u>Centroceros clavulatum</u>	Trace
<u>Cladophoropsis sp.</u>	Trace
<u>Pterocladia capillacea</u>	Trace
<u>Spyridia filamentosa</u>	Trace

2-3-94 Kailua Bay (Castle Point), Barbara Hudgins, forestomach, no tumor

<u>Codium edule</u>	60%
<u>Halimeda discoidea</u>	10
<u>Hypnea musciformis</u>	10
<u>Laurencia nidifica</u>	10
<u>Corallina sandvicensis</u>	5
<u>Turbinaria ornata</u>	5
<u>Caulerpa taxifolia</u>	Trace
<u>Dictyota sp.</u>	Trace
<u>Polysiphonia howei</u>	Trace

3-5-94 Ala Moana Park, Docare, forestomach

<u>Amansia glomerata</u>	80%
<u>Pterocladia capillacea</u>	20
<u>Cladophoropsis luxuriens</u>	Trace
<u>Coelothrix irregularis</u>	Trace
<u>Enteromorpha intestinalis</u>	Trace
<u>Hypnea musciformis</u>	Trace

3-6-94 Kailua Bay, Bob Moncrief, forestomach, tumors

<u>Hypnea musciformis</u>	40%
<u>Amansia glomerata</u>	25
<u>Laurencia nidifica</u>	25
<u>Dictyopteris sp.</u>	10
<u>Acanthophora spicifera</u>	Trace
<u>Caulerpa sertularioides</u>	Trace
<u>Cladophora fascicularis</u>	Trace
<u>Dictyota acuteloba</u>	Trace
<u>Halimeda discoidea</u>	Trace
<u>Jania capillacea</u>	Trace
<u>Pterocladia capillacea</u>	Trace
<u>Siphonocladus tropicus</u>	Trace

Spyridia filamentosa Trace

3-9-94 Kailua Beach, Jacklyn Boyer, forestomach, tumors

Acanthophora spicifera 99%  
Dictyosphaeria cavernosa 1  
Cladophora fascicularis Trace  
Gracilaria sp. Trace  
Hypnea cervicornis Trace  
Laurencia nidifica Trace  
Spyridia filamentosa Trace

3-14-94 Kahana Bay, Al Rogers, forestomach, tumors

Amansia glomerata 20%  
Codium arabicum 20  
Codium edule 20  
Pterocladia capillacea 20  
Turbinaria ornata 20  
Halimeda discoidea Trace

Black colonial ascidians (large pieces)

3-16-94 Waimanalo Beach Park, anonymous via Sea Life Park, forestomach, tumors

Acanthophora spicifera 80%  
Hypnea musciformis 20  
Amansia glomerata Trace  
Dictyota acuteloba Trace  
Gracilaria sp. Trace  
Grateloupia filicina Trace  
Hypnea cervicornis Trace  
Sargassum echinocarpum Trace

3-24-94 Kaneohe Bay, Jacob Chun, forestomach, tumors

Gracilaria salicornia 50%  
Halophila hawaiiiana 50  
Acanthophora spicifera Trace  
Laurencia nidifica Trace  
Lyngbya majuscula Trace  
Spyridia filamentosa Trace



4-10-94 Waialua, Steve Struckman, forestomach, tumors

<u>Hypnea musciformis</u>	90%
<u>Acanthophora spicifera</u>	10
<u>Dictyota acuteloba</u>	Trace
<u>Laurencia nidifica</u>	Trace
<u>Lyngbya majuscula</u>	Trace
<u>Polysiphonia sp.</u>	Trace
<u>Sargassum sp.</u>	Trace

Terrestrial plant material Trace

4-11-94 Pounder's Beach, Jerry Kermode, stomach, tumors

<u>Codium arabicum</u>	40%
<u>Codium edule</u>	40
<u>Amansia glomerata</u>	10
<u>Gelidium sp.</u>	10
<u>Rhodymenia anastomasans</u>	Trace
<u>Spyridia filamentosa</u>	Trace

4-13-94 Waikiki, Capt. Chay/Mark Heckman, forestomach, tumors

<u>Ulva fasciata</u>	90%
<u>Ulva reticulata</u>	10
<u>Amansia glomerata</u>	Trace
<u>Dictyota sp.</u>	Trace
<u>Hypnea musciformis</u>	Trace
<u>Padina japonica</u>	Trace

4-19-94 Kaneohe Bay, Merlin Okada, forestomach, no tumor

<u>Acanthophora spicifera</u>	90%
<u>Gracilaria salicornia</u>	10

Spongy animal material (tumor tissue?)

4-22-94 Punaluu, Bill Kuamoo, forestomach, no tumor

<u>Hypnea musciformis</u>	98%
<u>Acanthophora spicifera</u>	1
<u>Pterocladia capillacea</u>	1
<u>Microdictyon japonicum</u>	Trace
<u>Sargassum sp.</u>	Trace

5-3-94 Florida (necropsy), no tumor, secretory stomach

Pterocladia americana (?)

Other algae which I am not familiar with--

Bryothamnion sp. (?)

5-3-94 Florida (necropsy), no tumor, esophagus

Pterocladia americana (?)

Plocamium brasiliense (?)

Algae identification from samples taken from sea turtles  
(completed 5 April 1995)

02-18-94 (P/G 2-21-95) Lanikai, Brent Liesemeyer, esophagus, no tumors

<u>Codium phasmaticum</u>	70%
<u>Sargassum polyphyllum</u>	15
<u>Turbinaria ornata</u>	10
<u>Chondrococcus hornemanni</u>	4
<u>Hypnea musciformis</u>	1
<u>Ceramium sp.</u>	Trace
<u>Cladophora fasciculata</u>	Trace
<u>Laurencia nidifica</u>	Trace
<u>Polysiphonia howei</u>	Trace
<u>Ulva sp.</u>	Trace
One small foram shell	

03-13-95 Maunalua Bay, Brent Cfee, forestomach contents, tumor

<u>Codium arabicum</u>	100%
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01-26-95 Wailupe, John Willers, forestomach contents, tumors

<u>Hypnea musciformis</u>	80%
<u>Codium edule</u>	15
<u>Amansia glomerata</u>	5
<u>Acanthophora spicifera</u>	Trace
<u>Dictyota acuteloba</u>	Trace
<u>Lyngbya majuscula</u>	Trace

03-17-95 Kailua Bay, Syd Draul, forestomach contents, tumors

<u>Amansia glomerata</u>	80%
<u>Hypnea musciformis</u>	10
<u>Champia parvula</u>	5
<u>Sargassum echinocarpum</u>	5
<u>Ceramium sp.</u>	Trace
<u>Dictyota acuteloba</u>	Trace
<u>Halimeda discoidea</u>	Trace
<u>Microdictyon japonicum</u>	Trace
One large black lump of colonial ascidian	



03-06-95 Yokohama Bay Beach, Capt. Keolana via Vic Honda (NMFSLE), forestomach contents, unknown tumors

<u>Amansia glomerata</u>	90%
<u>Spyridia filamentosa</u>	10
<u>Microdictyon japonicum</u>	Trace

02-05-95 Kahala Beach via Ray Boland (SSG), forestomach, tumors, male

<u>Acanthophora spicifera</u>	80%
<u>Codium edule</u>	10
<u>Ulva fasciata</u>	10
<u>Bryopsis sp.</u>	Trace
<u>Hypnea cervicornis</u>	Trace
<u>Pterocladia capillacea</u>	Trace
Small snail eggs in mucus clumps	

02-22-95 Kawela Bay, Harriet Eisner via Noreen (Docare), forestomach, no tumors

<u>Amansia glomerata</u>	100%
<u>Pterocladia capillacea</u>	Trace

09-22-95 Kaneohe Bay, J541B, A.O.L. found in mouth

<u>Eucheuma denticulatum</u>	100%
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Dennis - Please return this copy with  
four ID's of the samples,  
Mahaio.

Algae samples sent to Dr. Dennis Russell

ID	DATE	PLACE	TUMORS	SAMPLE	George
1. Brent Liesemeyer	2/18/95	Lanikai	No	Esophagus	
2. Brent Cfee	3/13/95	Maunalua	Yes	Forestomach	
3. John Willers	1-26-95	Wailupe Pl.	Yes	Forestomach	
4. Syd Draul	3/17/95	Kailua Bay	Yes	Forestomach	
5. Capt. Keolana via Vic Honda (NMFS-LE)	3/6/95	Yokohama Bay	Unk	Forestomach	
6. Anon via Ray Boland (SSG)	2/5/95	Kahala Beach	Yes	Forestomach	
7. Harriet Eisner via Noreen (DOCARE)	2/22/95	Kawela Bay	No	Forestomach	
8. J541B	9/23/94	AOL, K-bay	-	Mouth	

- = data not available

George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822 - 2396

6 April 1995

Dear George,

There was nothing unusual in any of these last eight samples. Yes, the seven samples came and you have the identifications. I must have received the box and did the ID before your letter and therefore read your letter and expected another set of seven to arrive. Please check this to see if that is the case. With this present set completed you will have 90 samples of the 120 to your credit when I am paid.

Aloha,  
Dennis

P.S.

I have plenty of marking labels  
& will send all samples back  
this week.



Algae samples sent to Dr. Dennis Russell

ID	DATE	PLACE	TUMORS	SAMPLE
1. Turtle 01	8/23/91	Pearl & Hermes	-	Stomach
2. Don Heacock	7/11/94	Kauai	No	Forestomach
3. Don Heacock	1-26-95	Kealia Beach Kauai	No	Forestomach
4. Don Heacock	8-22-94	Kikiaola BH Kauai	Yes	Forestomach
5. Erica via Brooks Tamaye	10/12/94	Iauniupoko BP Maui	No	Forestomach
6. Shane (DOCARE) via Ray Boland (SSG)	12/18/94	Kalama Beach Kailua Bay	No	Forestomach
7. Brian O'Conner via Ray Boland (SSG)	1-23-95	Makai Pier Waimanalo	No	Forestomach

- = data not available

09-16-94 Maile Beach Park, Waianae Marine Patrol, Danny Gusman via Gerry Villalobos, no tumors, foregut contents

<u>Amansia glomerata</u>	90%
<u>Pterocladia capillacea</u>	10
<u>Microdictyon japonicum</u>	Trace

07-14-94 Kanohe Bay (Sugar Mill Beach), Richard Freeman, tumors, forestomach contents

<u>Codium edule</u>	50%
<u>Hypnea musciformis</u>	50
<u>Acanthophora spicifera</u>	Trace
<u>Ceramium sp.</u>	Trace
<u>Galaxaura sp.</u>	Trace
<u>Lyngbya majuscula</u>	Trace
<u>Polysiphonia sp.</u>	Trace
<u>Spyridia filamentosa</u>	Trace

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08-23-91 Pearl and Hermes, turtle 01, stomach contents

<u>Halophila hawaii<sup>ensis</sup></u>	100%
<u>Centroceros clavulatum</u>	Trace
<u>Spyridia filamentosa</u>	Trace

07-11-94 Kauai, Don Heacock, 46.0 - SCL, no tumors, stomach contents

<u>Amansia glomerata</u>	75%
<u>Pterocladia capillacea</u>	25
<u>Ceramium sp.</u>	Trace
<u>Jania capillacea</u>	Trace
<u>Sphacelaria sp.</u>	Trace

Large clumps of animal sponge material

01-26-95 Kealia Beach, Kauai, Don Heacock (Tarey Low - DOCARE) 38.3 - SCL, no tumor, forestomach contents

<u>Pterocladia capillacea</u>	100%
<u>Ulva rigida</u>	Trace

large clumps of animal sponge material

08-22-94 Kikialoa BA, kauai, Don Heacock, 42.0 - SCL, tumors yes C2, forestomach contents

<u>Pterocladia capillacea</u>	99%
<u>Amansia glomerata</u>	Trace
<u>Ceramium sp.</u>	Trace
Hydrozoan	Trace
Mussel shell	
Plastic scrap - clear and blue	
Seveal clear 50 um diameter monofilament threads	

10-12-94 Launiupoko Beach Park, Maui, Erica via Brooks Tamaye, 37.0 - SCL, no tumors, forestomach

<u>Pterocladia capillacea</u>	100%
<u>Ceramium sp.</u>	Trace
<u>Dictyota friabilis</u>	Trace

12-18-94 Kailua Bay, Kalama Beach, Shane (DOCARE) via Ray Boland (SSG), no tumors, stomach contents

<u>Hypnea musciformis</u>	40
<u>Laurencia nidifica</u>	40
<u>Dictyosphaeria cavernosia</u>	20
<u>Acanthophora spicifera</u>	Trace
<u>Dictyota divaricata</u>	Trace
<u>Halimeda discoidea</u>	Trace
<u>Lobophora variegata</u>	Trace
<u>Sargassum polyphyllum</u>	Trace

One small Physalia (Man-o-War) siphonophore jellyfish

01-23-95 Makai Pier, Waimanalo, Brian O'Conner via Ray Boland (SSG), 44.0 - SCL, no tumors, forestomach contents

<u>Codium phasmaticum</u>	80%
<u>Codium arabicum</u>	10
<u>Amansia glomerata</u>	5
<u>Pterocladia capillacea</u>	5
<u>Dictyopteris plagiogramma</u>	Trace
<u>Jania capillacea</u>	Trace



George Balazs  
NOAA National Marine Fisheries Service  
SWFC Honolulu Laboratory F/SWC2  
2570 Dole Street  
Honolulu, HI 96822 - 2396

13 May 1995

Dear George,

The latest sample you sent to me was Ahnfeltia concinna (3/30/95, B302, Mouth Sample, Kahaluu, Kona, Hawaii Island).

Aloha,

A handwritten signature in cursive script, appearing to read "Dennis".

89 credit

59 ALGAE SAMPLES SENT TO DR. DENNIS RUSSELL  
on 5/8/96

G. H. Balazs  
Marine Turtle Research Program

DATE	CONTACT	LOCATION	TUMORS	SAMPLE
--	CKC 941007-01 (FA)	Brevard County, 0.5 mile S. of Sebastian Inlet	Y	Secretory stomach
11-21-94	M. Coelho	Federation Camp, Lanai	N	Forestomach
02-03-95	W. Beimes (#12250-01)	Malaekahana State Rec. Area	Y	Forestomach
02-05-95	Sgt. R. Jones via Dr. T. Work (#12236-1)	Kaneohe Bay (KMCAS)	N	Forestomach
03-14-95	B. Quinn via S. Bloom	Kaneohe Bay	Y	Forestomach
03-15-95	J. Maple/B. Cate via C. Davenport	Puako, Hawaii	N	Forestomach
03-27-95	L. Thurston	Mokuleia Polo Farm	Y	Forestomach
03-31-95	J. Kermode	Pounders Beach	N	Secretory stomach
03-31-95	J. Kermode	Pounders Beach	N	Forestomach
04-04-95	J. Borsa	Waialua	Y	Mouth
04-21-95	C. Allen	Magic Island	Y	Forestomach
05-03-95	G. Severino/R. Gerell	Punaluu	N	Forestomach
05-04-95	V. Grundmains	Kalama Beach	N	Forestomach
05-05-95	A. Ledford via Pam	Kahala Beach	Y	Secretory stomach
05-09-95	P. Frierson	Waialua	N	Forestomach
05-12-95	Cpl. J. Deeds	Kaneohe Bay	Y	Forestomach
05-12-95	Cpl. J. Deeds	(Fort Hase Beach)	Y	Anal end
05-24-95A	Louis	Kaneohe Bay	N	small intestine
05-24-95B	Louis	(Fort Hase Beach)	N	Forestomach
05-25-95	Cpl. J. Deeds (#12274)	Laie	Y	Forestomach
05-30-95	C. Rabinowitz (#12289-03)	Kaneohe Bay (Pali Kilo)	Y	Forestomach
		Waimanalo Beach Park	N	Forestomach

DATE	CONTACT	LOCATION	TUMORS	SAMPLE
06-05-95	M. Monahan (#12289-02)	Lanikai Beach	N	Forestomach
06-16-95	M. Kaninaw	Kaneohe Bay (Kahaluu)	U	Forestomach
06-19-95	M. Oliphant (#12289-01)	Chun's Reef	N	Forestomach
06-29-95	M. Thomas via Clinton (#12293-01)	Kaneohe Bay (Kahaluu)	Y	Forestomach
07-07-95	Anonymous	Kaneohe Bay (Kahaluu)	Y	Forestomach
07-13-95	HPD Operator 117 via Offs. Arakawa/Hiranaka	Hauula Beach Park	U	Forestomach
07-18-95	B. Parecki/V. Sotello (#12312)	Kapoho, Hawaii	Y	Forestomach
07-24-95	J. Goebert	Kawainui Canal	Y	Forestomach
08-03-95	T. Ho via Carla	Kailua Beach Park	N	Forestomach
09-03-95	Clinton via N. Murasaki	Kahana Bay	N	Forestomach
09-07-95	B. Ortell/B. Thomas	Kaneohe Bay (Makani Kai Marina)	Y	Forestomach
09-07-95	P. Grady via S. Hau	Lahaina Harbor, Maui	Y	Forestomach
09-11-95	D. Ganley	Malaekahana Beach	Y	Forestomach
09-17-95	B. Fitzpatrick	Ewa Beach	Y	Forestomach
09-25-95	D. Mitchell	Kailua Beach (Oneawa Beach)	Y	Forestomach
10-05-95	A. Liu	Waimanalo Bay	Y	Forestomach
10-05-95	USCG P.O.s B. Bulman/ D. Carr	Maunaloa Bay	Y	Forestomach
11-06-95	K. Smith/K. Williamson via S. Hau	Kihei, Maui	Y	Forestomach
11-21-95	L. Fries via S. Hau	Wailea, Maui	N	Forestomach
12-11-95	A. Triana	Hickam AFB	Y	Forestomach
12-12-95A	Cpl. Crickenberger	Kaneohe Bay (Mokapu North Beach)	N	Forestomach
12-12-95B	Cpl. Crickenberger	Kaneohe Bay (Mokapu North Beach)	N	Forestomach
01-15-96	D. Heacock	Poipu (Kawailoa Bay), Kauai	Y	Forestomach



DATE	CONTACT	LOCATION	TUMORS	SAMPLE
01-15-96	J. Malcolm	Kawailoa Beach	Y	Forestomach
01-16-96	DOCARE via S. Bloom	Haleiwa Alii Beach Park	Y	Forestomach
01-22-96	K. Targove/J. Kermode	Pounders Beach	N	Forestomach
01-26-96	Mr. Rodriguez via S. Hau	Kahului Harbor, Maui	Y	Forestomach
02-02-96	Deputy Tomas	Haleiwa Boat Harbor	Y	Forestomach
02-05-96	D. Marrisfield via J. Crow	Betw. Portlock and Hanauma Bay	N	Forestomach
02-06-96	B. Hopkins	Maunalua Bay (Near Buoy #1)	Y	Forestomach
02-22-96	Albert via S. Hau	Maliko Gulch, Maui	Y	Forestomach
02-24-96	Tanya via N. Murasaki	Camp Mokuleia	N	Forestomach
03-06-96	S. Okamoto via S. Hau	Lahaina, Maui	Y	Forestomach
03-10-96	via S. Bloom	Kailua Beach Park	N	Forestomach
03-10-96	DOCARE via S. Bloom	Kahala Beach	Y	Forestomach
03-13-96	A. Brown	Makaha (Hawaiian Princess Hotel)	N	Forestomach
03-25-96	MPD/DOCARE via S. Hau	Launiupoko Beach Park, Maui	Y	Forestomach
04-22-96	Captured by net - R791	Waikiki, Sheraton	Y	Forestomach

## TOTAL SAMPLES:

54 Forestomach samples  
 3 Secretory stomach samples  
 1 Mouth sample  
 1 Anal end sample  
 --  
 59 Total samples

April 26, 1996  
 RUSSELL.SAM