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Mc Crow

With attachment
CONFIRMED TO BE UNCLASSIFIED
AUTHORITY: DOE/SA-20
BY H-R SCHMIDT, DATE: 6-16-94
D.R. GILSON

Ref: HSE:EPH

December 5, 1967

Dr. Edward C. Held
Laboratory of Radiation Ecology
Fisheries Center
University of Washington
Seattle, Washington 98105

Dear Ed:

The coconut crab, coconut, and pandanus samples which you sent to us have been analyzed for Sr-90 and Ca at HASL. To insure a homogeneous sample for aliquoting we decided to dry ash the entire sample. The activity levels given in the attached table are based on the weight of sample as received at HASL.

For comparison with the Bikini coconut crab data, I've included a table showing Sr-90 and Ca levels in coconut crabs collected on Rongelap in 1964. You people performed the dissections for us. The values are based on the wet weights which you provided. The Sr-90 levels in the Bikini crabs are 5 - 10 times higher.

If you have any comparative data, we'd like to see it.

Sincerely yours,

Edward P. Hardy, Jr., Director
Environmental Studies Division

cc: H. Beck, HSR ✓

FROM
NMPB-K

7238-3108-00281

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SPECIMENS FROM THE APR. - MAY 1967 BIKINI ATOLL SURVEY

Ref. letters: Aug. 17, 1967 & Aug 21, 1967
From Hald to Harley

<u>COCONE GRASS</u>				⁹⁰ Pci Sr	mg Ca	⁹⁰ Pci Sr
<u>Spec #</u>	<u>Island</u>	<u>Ref. #</u>	<u>Tissue</u>	per gram	per gram	per g Ca
				orig. sample	orig. sample	
89	Enyu	25184	muscle	22	14.	1500
		25185	exo-skeleton	330	230.	1500
		25136	hepato pancreas	39	33.	1200
106	Bikini	25215	muscle	54.	8.9	6000
		25216	exo-skeleton	1600	210.	7700
		25217	hepato pancreas	60	9.9	6100
109	Rukoji	25224	muscle	12	9.2	1300
		25225	exo-skeleton	3500	230.	15200
		25226	hepato pancreas	160	22.	7500
110	Rukoji	25227	muscle	46	7.9	5800
		25228	exo-skeleton	1900	230.	8300
		25229	hepato pancreas	140	59.	2400
111	Rukoji	25230	muscle	31	6.5	4800
		25231	exo-skeleton	1200	230.	5000
		25232	hepato pancreas	59	24.	2400
112	Rukoji	25233	muscle	35	10.	3400
		25234	exo-skeleton	2100	230.	9100
		25235	hepato pancreas	290	60.	4900
113	Rukoji	25236	muscle	54	9.9	5400
		25237	exo-skeleton	1500	200.	7700
		25238	hepato pancreas	160	46.	3600

COCONUT AND PANDANUS

1	Enyu	25000	pandanus - edible	20	5.3	3700
3	Enyu	25002	coconut - meat	0.03	0.23	120
7	Bikini	25019	coconut - meat	0.69	0.66	1000
46	Bikini	25076	pandanus - leaves	170.	14.	11600
57	Enyu	25039	pandanus - leaves	39.	14.	2800

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COMPARATIVE DATA FOR COCONUT CRABS
COLLECTED ON RONGELAP ISLAND DURING 1964
BNL MEDICAL SURVEY

<u>Tissue</u>	<u>pCi Sr⁹⁰ per gram orig. sample</u>	<u>mg Ca per gram orig. sample</u>	<u>pCi Sr⁹⁰ per g Ca</u>
liver	4 - 9	6 - 10	640 - 850
exo-skeleton	120 - 170	190 - 200	620 - 870
edible portion	4 - 6	6 - 8	720 - 880
remaining soft parts	4 - 6	6 - 7	690 - 860

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