

Ross

Rate of Feed Passage by Penaeus marginatus in minutes  
as affected by Individual, Size, and Ration

Treatment	Individual <sup>1/</sup>					Means		
	1	2	3	4	5	Size	Ration	Total
Compounded ration:								
Adult 13.0-15.0 g	210	105	160	140	135	150	± 35	
Adult 25.0-29.0 g	190	140	130	140	170	154	± 22	
Juvenile 0.3 - 0.5 g	65	75	60	65	75	68	± 6	124 ± 46
Squid ( <u>Loligo</u> sp.) ration:								
Adult 13.0-15.0 g	175	145	140	175	155	158	± 15	
Adult 26.0-29.0 g	175	185	200	210	190	192	± 12	
Juvenile 0.3-0.5 g	115	140	85	125	80	109	± 23	153 ± 38 139 ± 45

Values following ± are standard deviations.

<sup>1/</sup> Each figure represents the mean of 3 observations per animal.

Pool

Ration 1/	Shrimp meal %	Tuna meal %	Soybean oil meal %	Blood Meal %	Brewer's Yeast %	Vitamin %	Binder %	Total Protein %	Gross Energy
No binder	37.0	32.0	18.0	7.0	5.0	1.0	0	55.8	
Agar	35.0	30.0	16.0	7.0	5.0	1.0	6.0	53.6	
Agar	33.0	29.0	15.0	6.0	4.0	1.0	12.0	49.2	
Agar	31.0	27.0	13.0	6.0	4.0	1.0	18.0	45.8	
Gelatin-Knox	32.0	29.0	16.0	7.0	5.0	1.0	10.0	58.8	
Gelatin-Knox	29.0	26.0	14.0	6.0	4.0	1.0	20.0	61.5	
Egg-Chicken	32.0	29.0	16.0	7.0	5.0	1.0	10.0	54.1	
Egg-Chicken	29.0	26.0	14.0	6.0	4.0	1.0	20.0	52.1	
Gluten flour	33.0	29.0	15.0	6.0	4.0	1.0	12.0	54.6	
Gluten flour	27.0	23.0	15.0	6.0	4.0	1.0	24.0	52.9	
Locust Bean Gum-Carrageenan "Sea Gel" - Marine Colloids	36.0	32.0	18.0	7.0	5.0	1.0	1.0	55.3	
Locust Bean Gum - Carrageenan "Sea-Gel" Marine Colloids	36.0	32.0	18.0	7.0	4.0	1.0	2.0	54.8	
Sodium Alginate - Myers	15.0	8.0	40.6	0	10.0	2.0	1.0	37.3	
Shrimp ration - Purina Experimental	*	*	*	*	*	*	*	47.5	
Special cuts - Quaker Oats Co.	*	*	*	*	*	*	*	13.5	

1/ By binder source and/or manufacturer

\* Unknown

Temp. of H<sub>2</sub>O? Mean Percent Weight loss in Sea Water loss  
of Marine Rations Utilizing differing Sources  
and Levels of Binding Agents

Ration

1 Hour

3 Hours

5 Hours

No binder	38.86	59.62	100.00
Agar 6%	15.94	16.95	17.57
Agar 12%	6.33	13.10	15.65
Agar 18%	2.92	10.51	11.72
Gelatin 10%	10.79	<del>59.49</del>	<del>100.00</del>
Gelatin 20%	64.46	<del>100.00</del>	<del>100.00</del>
Egg 10%	16.86	32.92	17.75
Egg 20%	10.03	17.00	
Gluten 12%	8.30	16.49	
Gluten 24%	8.49	16.75	16.94
Sea Gel 1% - Marine Colloids	8.33	14.04	14.76
Sea Gel 2% - Marine Colloids			
Sodium Alginate 1% - Meyers	14.12	16.84	19.25
Purina Experimental	8.00	11.01	11.78
Special Cuts - Quaker Oats Co.	14.78	26.35	28.45

→ 26.35 or sugar!

What is minimum particle size that prawns will approach + eat? what is of tunicate particles? what is of tunicate particles?

1) By binder source, level and/or manufacturer

~~1)~~ ~~2)~~ ~~3)~~