THE WATER CONTENT OF MEDUSAE *(AURELIA)*

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A misapprehension concerning the water-content of medusae appears to be current among zoologists. Despite the fact that all of the exact published data show a water-content of 94-96.5% for medusae taken in sea-water of at least 30 parts per thousand salinity, many zoologists questioned by the author were of the opinion that medusae consist of more than 99% water. Statements to this effect also occur in textbooks. It was therefore decided to make some determinations on *Aurelia,* common near the laboratory. Three to five inch specimens, actively pulsating, were selected from a number brought in by the collector. They were not anatomically perfect, having suffered some marginal damage, but the least damaged ones were taken. They were drained for a few minutes, then placed in previously weighed glass or aluminum containers, quickly weighed to the third place, and subjected to dry heat in an electric oven, at temperatures which varied from 60 to 110°C. The smaller specimens dried in a few hours to a yellowish cake containing many salt crystals; the larger ones required 24 hours or longer. The drying was then completed in a desiccator over sulphuric acid until approximately constant weight was reached. The exact data on the nine specimens used are given in the accompanying table. Number 7 was thoroughly rinsed in fresh-water to test whether sea-water remaining on the other specimens, which were merely drained, would affect the result; its water content was the same as that of the others.

no.	wet wt. gr.	dry wt. gr.	% water
1	175.013	7.141	95.9
2	163.892	6.639	96.0
3	82.271	2.831	96.6
4	86.140	3.434	96.0
5	123.745	4.689	96.2
6	129.444	4.915	96.2
7	149.255	5.619	96.3
8	127.802	4.872	96.2
9	264.916	10.382	96.1

The water content of *Aurelia,* therefore, taken near the Mt. Desert Island Biological Laboratory is 95.9 to 96.6%. This region has a salinity of about 31-32 parts per thousand, thus below that of the open sea. Medusae in the open sea would probably have a still lower water content, because of the higher salinity of their medium.