Basically, I need some information about the life history of *Octopus cyanea* or the blue octopus. So to start, if you could fill out something resembling this table:

|  |  |  |  |
| --- | --- | --- | --- |
| **Stage** | **Time In Stage** | **Survivability** | **Growth Rate** |
| Egg |  |  |  |
| Larval |  |  |  |
| 1: Immature |  |  |  |
| 2: Incipient Maturity |  |  |  |
| 3: Mature |  |  |  |
| 4: Fully Mature |  |  |  |
| 5: Post Laying |  |  |  |
| Post Larval Phase (stages 1-5) |  |  |  |

Try to find multiple sources for these and they will probably have slightly different numbers, so if you could give the estimate, source, and what they controlled for (i.e. water was 25 C, they were fed x amount of food a day, anything else they mention is important) that would be awesome! Growth rates can change based on environment so that’s why I need the extra information. Note: this information may be different between males and females. Females are more useful to me, but I’ll take anything you find!

The stages 1-5 come from this paper:

Raberinary, D., & Benbow, S. (2012). The reproductive cycle of Octopus cyanea in southwest Madagascar and implications for fisheries management. *Fisheries Research*, *125–126*, 190–197. https://doi.org/10.1016/j.fishres.2012.02.025

But they’re a little unclear as to why they chose those 5 stages for females which is why I’m having you chase this.

**Other questions:**

What exactly distinguishes these stages from one another?

As I mentioned above, growth rate can change drastically with changes in water temp and food availability. Are there any studies that directly look at how this rate changes as temp changes? What about food ingested?

Places to start:

Herwig, J. N., Depczynski, M., Roberts, J. D., Semmens, J. M., Gagliano, M., & Heyward, A. J.

(2012). Using Age-Based Life History Data to Investigate the Life Cycle and Vulnerability of Octopus cyanea. *PLoS ONE*, *7*(8), e43679. https://doi.org/10.1371/journal.pone.0043679

Van Heukelem, W. F. (1976). Growth, Bioenergetics and Life-Span of Octopus Cyanea and Octopus Maya.