There is little knowledge about the egg development of freshwater crayfish (Astacus leptodactylus). Especially, some aspects of the postembryonic development of A. leptodactylus have been described in previous studies. However, all embryonic development of A. leptodactylus species, which has a long incubation period (5-6 month) has not been described. In this study, embryonic and post embryonic development of A. leptodactylus species was studied by a stereomicroscope under laboratory conditions which have similar temperature conditions with ones in their natural habitat in between 9oC - 15oC. The eggs of this species hatched in 1608 degrees x days under these conditions. After 7-8 days of hatching, juvenile stage I reached to juvenile stage II with changing first moult. After 9-10 days of first moult, juvenile stage II reached to juvenile stage III with changing second moult.