The paper presents data on reproduction of Lataste's toad, $Bufotes\ latastii$, in laboratory conditions. During the summer, such animals were kept at temperatures within $26-30^{\circ}\text{C}$ and a daylight duration of 16 hours in a horizontal terrarium with its ground made of shredded bark. Laboratory-bred two-spotted crickets, $Grillus\ bimaculatus$, were food for adult toads. Within 28 days (from early February till early March) the animals were kept at temperatures within $9.4-15.8^{\circ}\text{C}$, humidity within 20-48%, and under natural lighting. After the hibernation period, the toads were transferred to an aquarium with a water level of 5 cm and a small artificial island. Spawning was stimulated by double surfagon injection. The spawn- ing began 10 hours after the second injection and lasted 7 hours. The total length of the egg cords was 572 cm, and the egg number per clutch was 6,804. The incubation of eggs lasted 3–5 days, and the larvae began to feed in three days. Larval development lasted 56-86 days. The juveniles left water with body lengths within 12.9-16.8 mm and weights within 12.9-16.8 mm and 12.9 morths after the metamorphosis, the males were able for vocalization, and three months later they already had nuptial pads and attempted to mate.