

**Growth, Survival and Live Feed Utilization Efficiency
of the Hyrcanian Meadow Lizard, *Darevskia praticola hyrcanica* (Lacertidae, Reptilia)
in Captivity**

Artem A. Kidov, <https://orcid.org/0000-0001-9328-2470>; kidov_a@mail.ru

Russian State Agrarian University – Timiryazev Moscow Agricultural Academy
49 Timiryazevskaya St., Moscow 127550, Russia

Received 19 December 2018, revised 12 June 2019, accepted 25 October 2019

The paper presents materials on growing and winter hibernation of the Hyrcanian meadow lizard, *Darevskia praticola hyrcanica*, in artificial conditions. Juveniles were obtained from the captive breeding of lizards caught on the typical locality of this subspecies (Gadazyghahi Natural Boundary, the Talysh Mountains, Astara District, Azerbaijan) in the first decade of May, 2016. Immediately after leaving the eggs, newborn lizards were placed in groups of 5 specimens each into plastic 39×28×28 cm containers. Six groups were formed in total, and our research involved 30 lizards. The animals from the first three containers received only two-spotted crickets, *Grillus bimaculatus*, as feed (the control group). The lizards from the second three containers ate speckled cockroaches, *Nauphoeta cinerea* only (the experimental group). The feed was offered to the lizards every other day. The growing lasted 450 days. The weight gain, survival and feed costs per unit weight of the animal (feed coefficient) were investigated. After growing the animals were placed into wintering rooms, where they were kept without feeding for 60 days at a temperature between 4–11°C. It was noted that during 450 days of growing the cockroach-fed lizards did not differ in weight from the cricket-fed animals. The feed coefficient of young meadow lizard growing with cockroach (11.7–14.3) was similar to that of the animals that ate their traditional food, crickets (12.3–12.7). The survival rate of young lizards in different containers for 450 days of cultivation on both feed types was 100%. The lizards that ate cockroaches showed a better survival rate (100%) in the period of winter hibernation than the animals from the control group (86.6%).

Key words: *Darevskia praticola hyrcanica*, *Grillus bimaculatus*, *Nauphoeta cinerea*, feeding, zooculture.

DOI: <https://doi.org/10.18500/1814-6090-2020-20-1-2-35-42>

This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 License

REFERENCES

- Berezin M. V., Kompantseva T. V., Tkacheva M. V., Tyurina E. S. *Metodicheskie rekomendatsii po razvedeniiu kormovykh nasekomykh* [Guidelines for breeding of feed insects]. Moscow, Moskovskii zoopark Publ., 2008. 48 p. (in Russian).
- Blokhin G. I., Kidov A. A., Sashina L. M., Pykhov S. G. *Zookul'tura bespozvonochnykh* [Zooculture of Invertebrates]. Moscow, Izdatel'stvo RGAU-MSKhA imeni K. A. Timiriazeva, 2010. 158 p. (in Russian).
- Doronin I. V. *Sistematika, filogeniia i rasprostranenie skal'nykh iashcherits nadvidovykh kompleksov Darevskia (praticola), Darevskia (caucasica) i Darevskia (saxicola)* [Systematics, Phylogeny and Distribution of Rock Lizards of Supra-species Complexes *Darevskia (praticola)*, *Darevskia (caucasica)* and *Darevskia (saxicola)*]. Diss. Cand. Sci. (Biol.). Saint Petersburg, 2015. 371 p. (in Russian).
- Kidov A. A. On distribution of meadow lizard *Darevskia praticola* (Eversmann, 1834) (Reptilia, Sauria: Lacertidae) in forest belt of Talysh in Azerbaijan. *The Problems of Herpetology: Proceedings of the 4th Meeting of the Nikolsky Herpetological Society*. Saint Petersburg, Russkaya kolleksiya Publ., 2011, pp. 109–112 (in Russian).
- Kidov A. A. On Reproductive Biology of the Hyrcanian Meadow Lizard, *Darevskia praticola hyrcanica* (Lacertidae, Reptilia). *Current Studies in Herpetology*, 2018 a, vol. 18, no. 3–4, pp. 118–124 (in Russian). DOI: 10.18500/1814-6090-2018-18-3-4-118-124
- Kidov A. A. Parasite-host relationships of the Ixodid Tick, *Ixodes ricinus* (Linnaeus, 1758) and Hyrcanian Meadow Lizard *Darevskia praticola hyrcanica* (Tuniyev, Doronin, Kidov, et Tuniyev, 2011) in Talysh Mountains (Southeastern Azerbaijan). *Russian J. of Parasitology*, 2018 b, vol. 12, no. 1, pp. 27–34 (in Russian). DOI: <https://doi.org/10.31016/1998-8435-2018-12-1-27-34>
- Kidov A.A., Timoshina A. L. Reproduction of the Black Sea lizard, *Darevskia pontica* (Lantz et Cyren, 1919) on the North-East of the area. *Bulletin of Moscow Region State University, Ser. Natural science*, 2017, no. 1, pp. 12–20 (in Russian). DOI: 10.18384/2310-7189-2017-1-12-20

- Kidov A. A., Timoshina A. L., Matushkina K. A., Pykhov S. G., Livadina L. V., Zhirimes V. G. Materials for the Study of Reproductive Biology of Lacertid Lizards (Reptilia, Sauria, Squamata: Lacertidae) in the Caucasus. *Scientific Research in Zoological Parks*, 2011, vol. 27, pp. 100–113 (in Russian).
- Kidov A. A., Kovrina E. G., Timoshina A. L., Matushkina K. A., Blinova S. A., Afrin K. A. Reproductive Strategy of the Black Sea lizard (*Darevskia pontica* (Lantz et Cyren, 1919)) on Northwestern Caucasus. *Izvestiya Russian State Agrarian University – Moscow Timiryazev Agricultural Academy*, 2015, no. 6, pp. 47–57 (in Russian).
- Kidov A. A., Timoshina A. L., Hairutdinov I. Z., Matushkina K. A. Age, growth and reproduction of the Black Sea lizard, *Darevskia pontica* (Lantz et Cyren, 1919) on the Northwest Caucasus. *Bulletin of Moscow Region State University, Ser. Natural Science*, 2016, no. 4, pp. 17–25 (in Russian).
- Kidov A.A., Nemyko E.A., Ivanov A.A., Pykhov S.G. About cases of late reproduction in the Pontic lizard, *Darevskia pontica* (Lantz et Cyren, 1919) on the Northwest Caucasus. *Vestnik of Chuvash State Pedagogical University named after I. Ya. Yakovlev*, 2018, no. 2 (98), pp. 44 – 49 (in Russian).
- Kudryavtsev S. V., Frolov V. E., Korolev A. V. *Terrarium i ego obitateli* [Terrarium and its Inhabitants]. Moscow, Lesnaia promyshlennost' Publ., 1991. 349 p. (in Russian).
- Kudryavtsev S. V., Mamet S. V., Frolov V. E. *Reptilii v terrariume* [Reptiles in the Terrarium]. Moscow, Sel'skaia Nov' Publ., 1995. 252 p.
- Lozovskaya M. V., Blokhin G. I., Lozovskiy A. R., Kalmykov A. P., Fedorovich V. V. Zookul'tura: sostoianie i perspektivy razvitiia [Zooculture: State and Prospects of Development]. Astrakhan, Izdatel'skii dom "Astrakhanskii universitet", 2007. 318 p. (in Russian).
- Sashina L. M. *Osobennosti biologii i pitatel'naia tsennost' sverchkov raznykh vidov pri razvedenii v kormovykh tseliakh* [Features of Biology and Nutritional Value of Crickets of Different Species When Breeding for Forage Purposes]. Diss. Cand. Sci. (Biol.). Moscow, 2006. 136 p. (in Russian).
- Sokolov S. L., Alshinetsky M. V., Berezin M. V., Efeykin B. D., Spiridonov S. E. Acanthocephalans *Prosthenorchis* cf. *elegans* (Archiacanthocephala: Oligacanthorhynchidae), Parasites of Primates in the Moscow Zoo. *Parazitologiya*, 2016, vol. 50, no. 3, pp. 185–196 (in Russian).
- Tuniyev S. B., Doronin I. V., Kidov A. A., Tuniyev B. S. Systematic and Geographical Variability of Meadow Lizard, *Darevskia praticola* (Reptilia: Sauria) in the Caucasus. *Russian J. of Herpetology*, 2011, vol. 18, no. 4, pp. 295–316.

Cite this article as:

Kidov A. A. Growth, Survival and Live Feed Utilization Efficiency of the Hyrcanian Meadow Lizard, *Darevskia praticola hyrcanica* (Lacertidae, Reptilia) in Captivity. *Current Studies in Herpetology*, 2020, vol. 20, iss. 1–2, pp. 35–42 (in Russian). DOI: <https://doi.org/10.18500/1814-6090-2020-20-1-2-35-42>
