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**Captive breeding peculiarities of the Leopard Gecko  
 (*Eublepharis macularius*)**

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**Abstract:** *Eublepharis macularius*, or the *Leopard Gecko*, belongs to the family *Gekkonidae*, native to the dry and semi-arid regions of Afghanistan, Pakistan, and northwestern India. Due to its fascinating appearance and calm temperament, this species has become one of the most popular pet reptiles worldwide. It is also appreciated for its relatively docile and adaptable behavior. These reptiles have been kept in captivity for a very long time, and providing an adequate microclimate and appropriate diet leads to easy adaptation to captive life. This study was conducted at the Faculty of Veterinary Medicine Iasi, Department of Pathology of Exotic Animals and New Companion Animals, and at a private location where an enthusiast owner keeps 37 specimens. The study monitored adaptation, microclimate conditions, and feeding, and identified the reproductive and growth characteristics of the *Leopard Gecko*. Throughout the study, thermal (20–34°C) and humidity (30–90%) variations were maintained within species norms; animals used both temperature zones but showed a preference for areas of higher humidity. No major behavioral differences were observed between the simple system (plain substrate) and the biotope system (mixed substrate); however, specimens housed in bioactive habitats showed an absence of digital shedding problems and a higher activity level. Regarding feeding, accelerated development was observed during the first year of life in specimens fed exclusively on mealworms (*Tenebrio molitor*) supplemented with calcium powder and vitamins, with no long-term consequences due to prey diversification after one year of age. The diet was supplemented for higher nutritional value with a varied range of fruits (mango, apple, banana, orange, pear, green/yellow melon), vegetables (carrots, sweet potatoes, bell peppers, and various green leaves), and cereals (dog food with a protein content below 15%). Regarding reproductive characteristics, the mating period was observed to vary from January–March through July–August, with females producing up to 7 clutches of 2 eggs per season.

• **Introduction**

Observing the growth, adaptation, feeding, and reproduction requirements of the Leopard Gecko.

• **Material and method**

Research was conducted on 37 specimens of Leopard Geckos, focusing on microclimate, behavior, diet, reproduction, and pathologies encountered in captivity.

• **Results and discussions**

**Results regarding microclimate conditions:** minimal enclosure, temperature - 20-34°C, humidity - 30%-90%, hiding places with varying temperatures and humidity levels, substrate - cellulose towels.



**E. Macularius – different life stages**

• **Results and discussions**

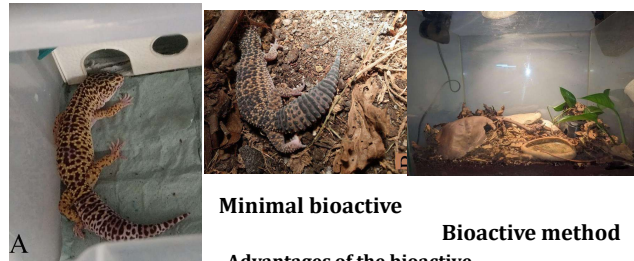
**Reproduction results:** mating period: January-March to July-August; laying series between 3-7 with 2 eggs per series; increased activity of males; decreased appetite in both sexes; after mating, the male loses interest, eggs are laid 10-18 days after mating; eggs hatch after 28-32 days of incubation; the sex of gecko is dependent on the incubation temperature.

The influence of temperature on sex during incubation in 28 eggs.

Sex	Temperature				
	27°C	28°C	30°C	31°C	32°C
Male	2	2	3	4	5
Female	4	4	3	2	1
Total number	6	6	6	6	6



The stages of hatching



**Minimal bioactive**

**Bioactive method**

**Advantages of the bioactive**



maintaining constant temperature and humidity; easier shedding; more enrichment objects, the use of invertebrates for decaying matter.

**Bioactive method**

**Minimal method**

**Results regarding dietary characteristic**

The diet used: mealworms (*Tenebrio molitor*) supplemented with calcium powder and vitamins – ensure development in the first year of life; varieties of invertebrates offer slow and long growth; feeding invertebrates with a variety of fruits, vegetables, and grains (poultry feed, dog food pellets).

• **Conclusions**

*Eublepharis macularius* is one of the “easiest” lizards to keep at the present.

The pathologies identified are caused by unfavorable microclimate conditions and inadequate nutrition.