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First case of erythristic Common Frog, *Rana temporaria* Linnaeus, 1758, in Latvia

Alessandro Di Marzio[1,*], Rebeka Šķērstiņa[1], and Elza Birbele[1,2]

Erythrism, a pigmentation anomaly characterised by an unusual abundance of red hues, has been documented in both reptiles and amphibians (e.g., LeClair et al., 2024; Maèát et al., 2016). It is less dominant than other pigmentary conditions, such as albinism and melanism (Allain et al., 2023). An exception is the Red-backed Salamander, *Plethodon cinereus* (Green, 1818), a species with a well-documented erythristic morph and an extensive body of literature detailing its frequency, genetic basis, and ecological significance (Anthony et al., 2008; Moore and Ouellet, 2015). In most other amphibian species, however, reports of erythrism remain rare and anecdotal.

Erythrism may result from genetic causes, as evidenced by selective breeding occurring in captivity (Allain et al., 2023). Through a literature review, we found seven published reports describing erythristic frogs (Table 1). All of these include photographs of the animals, except for the study by Telford (1952). Only one report (McAlpine and Gilhen, 2018) documented more than one individual exhibiting erythrism. The observation described by Ruiz-Elizalde (2019) was originally reported as an albino with pigmented eyes. However, examination of the associated image, we consider this individual to be more consistent with traits of erythrism. This possible misidentification supports the notes made by Allain et al. (2023) and Henle and Dubois (2017) on the frequent confusion in the classification of pigment anomalies in amphibians due to overlapping or poorly defined diagnostic criteria. Considering such inconsistencies, these authors have suggested the need for a unified, standardized classification system for pigmentation anomalies in herpetofauna.

We add our recent finding of an adult *Rana temporaria* exhibiting clear erythrism to the list of erythristic frog observations (Table 1). The frog (Fig. 1A) was found by a local resident in northeastern Latvia in 2024 and was collected by Riga ZOO staff for long-term monitoring of the colouration. After one year in captivity, the solid red pigmentation changed, with the white markings becoming more visible. (Fig. 1B). This is the first documented case of erythrism in an amphibian in Latvia.

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[1] Science and Education Department, Riga National Zoological Garden, Riga LV-1015, Latvia.

[2] Faculty of Medicine and Life Sciences, University of Latvia, Riga LV-1004, Latvia.

[*] Corresponding author. E-mail: alessandro.dimarzio@rigazoo.lv

Table 1. Reported cases of erythrism in frogs, showing species, country, number of animals observed (*n*), authors, and year of publication. An asterisk (*) indicates that the publication did not include photographic evidence.

Species	Country	*n*	Authors
Epipedobates espinosai (Funkhouser, 1956)	Ecuador	1	Peñaherrera and Pinos-Sánchez, 2021 (as *E. darwinwallacei*)
Pelobates fuscus (Laurenti, 1768)	Poland	1	Kolenda et al., 2017
Pseudacris crucifer (Wied-Neuwied, 1838)	Canada	3	McAlpine and Gilhen, 2018
Pseudacris crucifer	USA	1	Hartzell, 2022
Pseudacris ocularis (Holbrook, 1838)	Florida	2	Telford, 1952*
Rana parvipalmata López-Seoane, 1885	Spain	1	Ruiz-Elizalde, 2019 (as *R. t. parvipalmata*)
Rana temporaria Linnaeus, 1758	Latvia	1	this study
Rana temporaria	England	1	West and Allain, 2020

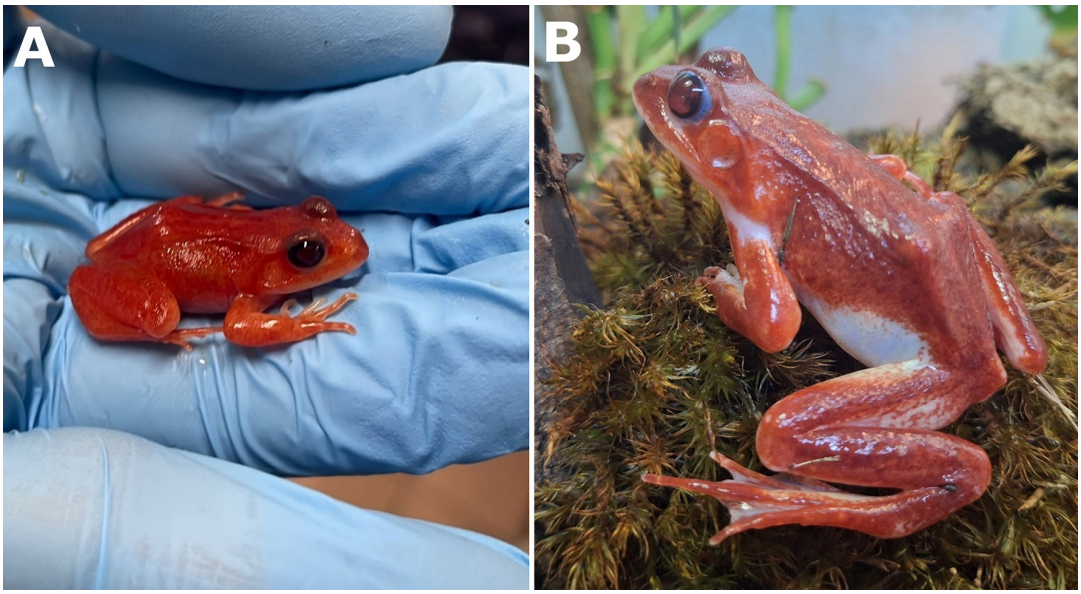

Figure 1. (A) Erythristic *Rana temporaria* caught in northeastern Latvia in 2024. (B) The same individual after one year in captivity at Riga ZOO.

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