

# SYSTEMATIC OF AMHIBIA

**Phylum:** Chordata

**Group:** Craniata

**Subphylum:** Vertebrate

**Superclass:** Tetrapoda

**Class:** Amphibia

**1. Subclass:** Anuromorpha

**Ordo:** Anura

**2. Subclass :** Urodelomorpha

**Ordo:** Urodela

**3. Subclass :** Caeciliomorpha (Gymnophiona)

**Ordo:** Apoda

## ORDO: ANURA (FROGS AND TOADS)

- The approximately 5970 species of frogs and toads that compose order Anura (Gr. *an* without, *oura* tail) are for most people the most familiar amphibians.
- Anura is an old group, known from the Jurassic period, 190 million years ago.
- Frogs and toads occupy a great variety of habitats. Their aquatic mode of reproduction and water permeable skin prevent them from wandering too far from sources of water, however and their ectothermy bars them from polar and subarctic habitats.
- They are specialized for jumping as suggested by their the alternative order name, Salientia, which means leaping.
- Taxonomists recognize 49 families of frogs and toads.

**Family:** Discoglossidae

**Genus:** *Discoglossus*

- Length: 5-8 cm.
- Eyelids and disc-shaped tongues are available.

**Genus:** *Bombina* (Red frog)

- They are up to 5 cm in length.
- When scared; puts his back legs on his back.
- Leaves a scent similar to leek

**Family:** Rhinophrynidae

**Genus:** *Rhinophrynus*

- They have short legs and no teeth.
- They dig up the soil with their buoyed shovel structures on their feet.

## **Family: Pelobatidae (Soil frogs)**

- Their length is between 3.5 and 12 cm.

## **Genus: *Pelobates***

- It is also called a garlic frog because they emit a garlic-like odor during a danger.

## **Family: Bufonidae (Terrestrial frogs)**

- Length: 2-20 cm
- Swimming curtains are in half.
- No jaws on teeth.
- There are bidder organs in men.
- Their bodies are completely warty.

## **Family: Hylidae (Tree or leaf frogs)**

- Length: 2.5-12 cm
- Adhesive discs have been enlarged at the fingertips.

*Hyla arborea*: One of the loudest frogs. They match the media color.

## **Family:Leptodactylidae**

- Length: 2-20cm
- The finger is flattened and there are no swimming curtains.

## **Family: Rhinodermatidae**

Length: 1-3 cm

*Rhinoderma darwini*: Men take the eggs in his mouth and the tongue tucks the sound wires. The eggs are opened here, the larva is completed by completing the stage.

## **Family: Ranidae(Genuine Water Frogs)**

- Length: 1.5-25 cm
- Their legs are very long and behind the tongue are free.
- Upper mandible have teeth.

## ORDO: URODELA (CAUDATA)

- Tail
- It comprises tailed amphibians, approximately 620 species of salamanders.
- They are typically small.
- Most have limbs set at right angles to the trunk, forelimbs and hindlimbs of approximately equal size.
- They are carnivorous as both larvae and adults, preying worms, small arthropods and small molluscs.
- Their body is similar to lizards but is distinguished by the absence of scales.

## **Family: Cryptobranchoidea (Giant salamander)**

- Length: 50-200 cm
- They are the most primitive amphibians.
- They don't have eyelids.

## **Family: Salamandridae (Salamander)**

- Length: 5-32 cm.
- Females have sperm collection sac.
- Internal fertilization
- Our species are belong to this family.
- The dorsal fin is formed during reproduction period on males of genus *Triturus*.
- There are numerous vertebrae and long ribs.
- There are mucus and poisonous glands on the skin.

# ORDO: APODA

- There are numerous vertebrae and long ribs.
- There are mucus and poisonous glands on the skin.

## **Family: Ichthyophiidae**

- They have tails.

## **Family: Typhlonectidae**

- They don't have tails.
- They are viviparous and oviparous.

## **Family: Coecilidae**

- Some of them are oviparous; some are ovoviviparous.

# SOME SALAMANDERS SPECIES LIVING IN TURKEY

**Suborder: Salamandroidea**

**Family: Salamandridae**

*Salamandra salamandra* (Syn: *Salamandra infraimmaculata*)

*Mertensiella caucasica*

*Lyciasalamandra luschani* (Syn: *Mertensiella luschani*)

*Neurergus crocatus*

*Neurergus strauchi*

*Lissotriton vulgaris* (Syn: *Triturus vulgaris*)

*Ommatotriton vittatus* (Syn: *Triturus vittatus*)

*Triturus karelinii*

# SOME ANURA SPECIES LIVING IN TURKEY

**Subordo: Opisthocoela**

**Family: Discoglossidae**

*Bombina bombina*

**Subordo: Anomocoela**

**Family: Pelobatidae**

*Pelobates syriacus*

**Family: Pelodytidae**

*Pelodytes caucasicus*

**Subordo: Procoela**

**Family: Pseudidae**

**Family: : Bufonidae**

*Bufo bufo*

*Bufo viridis*

**Family: : Hylidae**

*Hyla arborea*

*Hyla savignyi*

**Family: Ranidae**

***Pelophylax ridibundus* (Syn: *Rana ridibunda*)**

***Pelophylax bedriagae***

(marsh frog)

***Rana dalmatina***

***Rana macrocnemis***

***Rana camerani***

***Rana holtzi* (Taurus)**

***Rana levantina***