

# Poisonous Plants of Turkey

## Week 13

### **POISONOUS Taxaceae FAMILY**

Resin-free, evergreen, dioic, large trees.

The seed is small.

When the plant is matured, a glassy, red-colored, fleshy structure is formed around the seed which is called **ARILLUS (=Aril)**.

## ***Taxus baccata***

(Common yew; Porsuk Ağacı)

### **DESCRIPTION:**

Evergreen, tree or shrub. Up to 20 m. The branches are alternate.

It has a reddish brown scaly bark.

The wood is rather hard. Linear green leaves are about 2.5 cm.

Male flowers are short-pedicellate and come out from the leaf base in groups.

Female flowers are found individually on the side branches. Seed is surrounded by a red, fleshy ARILLUS.

**FLOWERING TIME:** April-May

**DISTRIBUTION AND**

**HABITAT:** Between 1000-1900 m,  
Thrace, Black Sea, East Aegean,  
Mediterranean regions.

**TOXIC PARTS:**

Almost every part of the plant is toxic; leaves, bark, flowers, seeds. Arillus is mildly sweet, not very toxic.

# **TOXIC COMPOUND(S):**

Taxine alkaloids (They block sodium and calcium channels).

# **POISONOUS PLANTS: Ericaceae FAMILY**

**RHODODENDRON (Rhododendron) species**

***Rhododendron ponticum*** (Pontic rhododendron; Orman gülü, Komar)

**It is an evergreen shrub  
growing in humid forests of  
North Anatolia.**

## **DESCRIPTION**

**Evergreen perennial shrub or tree growing up to 10 m. Leaves are 10-20 cm long, leathery, lanceolate-elliptic / obovate, entire at margin, the upper surface bright green, lower surface lighter green.**

**Flowers include 20 flowers in terminal racemes.  
Calyx tube-shaped, 5-lobed; corolla tube-shaped, bell-shaped, 5-lobed.**

**Fruits 1-3 cm, septical capsule.**

**It contains many seeds in brownish black color.**



**FLOWERING TIME:** March-August

**DISTRIBUTION AND HABITAT**

It grows up to 150-2000 m, which generally occurs in the forests with broad-leaved trees (usually beech tree) in North Anatolia.

**TOXIC PARTS:**

Flowers, leaves and the honey produced by the bees using the nectar of flowers of *Rhododendron ponticum* .

# **TOXIC COMPOUND(S):**

GRAYANOTOXIN (= Andromedotoxin) and similar compounds.

Compounds in the structure of cyclic diterpene bearing a large number of hydroxyl groups

**Honey made by the bees using the nectar of these flowers, known as «mad honey» and is toxic, comes from the compound called andromedotoxin that carries this feature. Honey's blood pressure-lowering effect is known.**

# **POISONOUS PLANTS :**

## **APOCYNACEAE FAMILY**

### **Nerium oleander (Zakkum)**

#### **DESCRIPTION:**

Evergreen shrub and small shrub that can grow up to 6 m., With white sap.

Leaves 6-30 cm long, leathery-like hard, glabrous, narrow elliptical, pointed tip, middle vein prominent.

Flowers in a large cluster at the top, calyx 5-piece, corolla 3-5 cm long, compound funnel-shaped at the base, 5-lobed, red, pink or white in color

The fruit is 10-20 cm long and consists of two pieces that are folded open.

## **FLOWERING TIME:**

April-September

## **DISTRIBUTION AND HABITAT**

At altitudes between 0-800 m.

It is abundant in the Aegean and Mediterranean Regions.

Naturally in stream beds;

It is grown as an ornamental plant in parks, gardens and roadsides.

## **TOXIC PARTS**

Whole plant

## **TOXIC COMPOUND (S)**

Oleandrin; Cardioactive  
glycoside