

Poisonous Plants of Turkey

Week 12

POISONOUS PLANTS: APIACEAE FAMILY

Cicuta virosa

(Water hemlock; Su baldıranı)

DESCRIPTION:

Plant herbaceous perennial, 50-120 cm tall; stem erect, round, hollow, glabrous, smooth, Leaves are 30-40 cm long, pedicels long, hollow, folioles serrate at margin, linear-lanceolate, 2.5-10 cm long.

Inflorescence is a compound umbel. Flowers are white and pinkish.

Fruits are ovoid and mericarps (carpels) not separating from each other and have hairy surface.

The most poisonous plant of Northern Hemisphere.

Underground part is thick and fleshy, characterized by small, numerous internal chambers that can be observed if sliced lengthwise.

DISTRIBUTION AND HABITAT: It grows on marshes and waterfronts of Erzurum and Trabzon provinces.

FLOWERING TIME: June-July.

The flowers have a peculiar heavy smell which is reminiscent of parsnips (yabani havuç) or celery (kereviz).

TOXIC PARTS: All parts of the plant are highly toxic, particularly the underground organs.

POISONOUS COMPOUND/S:

Cicutoxin: Unsaturated long chain aliphatic alcohol

GABA (Gamma-Aminobutyric Acid)receptor antagonist.

Potassium channel blocker

Conium maculatum **(Hemlock; Baldıran)**

DESCRIPTION: Herbaceous, 30-200 cm tall, stinky (it smells of mouse urine), erect; stem glabrous, finely grooved, bright green with purple spots. Leaves compound, dark green, base of petiole is thick and wraps the stem.

Flowers (8-15) on the top as a compound umbella. Petals are free and white.

Schizocarp fruits are broadly ovate, glabrous with distinct linear ridges.

DISTRIBUTION AND HABITAT

It is one of the poisonous plants widely grown in northern hemisphere.

In our country, it grows naturally in almost every region; in forested areas, wetland slopes and around fields/ gardens.

TOXIC PARTS:

All plants, especially roots and seeds.

TOXIC COMPOUND(S)

Coniin and similar alkaloids.

Heracleum sphondylium (Hogweed; Tavşancıl otu)

DESCRIPTION:

-Plant between 0.5-1.5 m.

-Stem angled, channelled and hairy.

-Leaves pinnately divided, basal leaves up to 60 cm long, petiolate, pubescent or glabrous.

-Flowers white or greenish, in compound umbellas.

-Fruit flattened and elliptical, 6-10 mm long, winged at margin.

DISTRIBUTION and HABITAT:

North Anatolia. Around rivers and fields. 4 sub-species are grown in Turkey.

FLOWERING TIME: May-July

TOXIC COMPOUND(S):

6,7-Furanocoumarins

HARMFUL PARTS: All parts of the plant and its sap

POISONING: When the skin come into contact with the sap, phototoxicity is seen on the skin due to the furanocoumarin content of the plant, which is called as «meadow dermatitis».

The effect increases with severe sunlight and humidity.

POISONOUS PLANTS: Scrophulariaceae Family

Digitalis (Foxglove; Yüksükotu) Species

DESCRIPTION: Herbaceous, 1-1.5 m, branched, erect, biannual or perennial plants.

Leaves are simple, alternate at the base of stem or on the stem.

Inflorescence is racemose.

Calyx 5 lobed, short; yellowish / whitish (species in Turkey), corolla tube-shaped, two-lobed and quite long. Stamen 4.

Digitalis purpurea
(Common foxglove)

It is a European plant.

Usually used in landscaping.

**It does not naturally grown in
Turkey.**

FLOWERING TIME: June-July

TOXIC PARTS

Whole plant is toxic. 2-3 dry leaves of the plant is lethal.

Because of the bitter taste, they cannot be eaten too much. Therefore the lethal cases are not seen very often.

TOXIC COMPOUND(S): Cardioactive glycosides (Digitoxin, digoxin)

***Gratiola officinalis* (Common Hedgehyssop; Hüdaverdi Otu)**

DESCRIPTION:

Plant is perennial, herbaceous, 20-50 cm tall grown in water. Stem red, glabrous, erect and rhizomatous.

Leaves alternate, sessile, lanceolate and serrate at margine.

Flowers are white and they found individually in the leaf bases.

Corolla 1-2 cm long, funnel shaped with two lips.

FLOWERING TIME

June-October

DISTRIBUTION and HABITAT

Thrace, Western Black Sea, Aegean, Western Mediterranean, Central Anatolia regions (0-1400 m altitude).

Water edges, irrigation canals and marshes.

TOXIC PARTS

All above ground parts.

TOXIC COMPOUND(S):

Cucurbitacines, Cucurbitacine glycosides.