

Poisonous Plants of Turkey

Week 14

POISONOUS PLANTS: **Solanaceae Family**

Annuals or perennials, herbaceous, climbers, shrubs or trees; mainly grow in Australia, Central and South America.

These family has species contain tropan alkaloids and are used in pharmacy and they are poisonous.

It is also an important family in terms of plants used as vegetables.

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Fam.: SOLANACEAE

Genera found in Turkey:

Natural

- **Atropa*
- **Mandragora*
- **Hyoscyamus*
- **Datura*
- **Solanum*
- **Physalis*
- **Withania*
- **Lycium*
- **Physochlaina*
- *Poisonous

Cultivated

- **Nicotiana*
- Capsicum*
- Solanum*
- Lycopersicum*

SOLANACEAE PLANTS

<u>Latin Name</u>	<u>Vernacular Name</u>	<u>Turkish Name</u>	<u>Drug Name</u>	<u>Poisonous Compounds</u>
- <i>Atropa belladona</i>	Deadly nightshade	Güzel Avratotu	Folia Belladonnae	Atropin hyoscyamin scopolamin
- <i>Mandragora autumnalis</i>	Mandrake / Satan's Apple	Adamotu	Radix Mandragorae	Atropin hyoscyamin scopolamin Kuskohigrin
- <i>Datura stramonium</i>	Jimson weed	Tatula, boru Çiçeği	Folia Stramonii	Atropin hyoscyamin scopolamin
- <i>Datura metel</i>	Thorn Apple	Boru Çiçeği	-	Atropin hyoscyamin scopolamin
- <i>Nicotiana tabacum</i>	Tobacco plant	Tütün	Folia Nicotianae	nicotin
- <i>Nicotiana rustica</i>	Aztec tobacco	Deli Tütün	Folia Nicotianae	nicotin
- <i>Hyoscyamus niger</i> - <i>Hyoscyamus reticulatus</i>	Black henbane White henbane	Banotu Gavur Haşhaşı	Folia Hyoscyami Semen Hyoscyami	Atropin Scopolamin
- <i>Solanum dulcamara</i> - <i>Solanum nigrum</i>	Bittersweet Black nightshade	Yaban Yasemini Köpek Üzümü	Stipites Dulcamarae Herba Solani nigri	glyco-alkaloids
- <i>Physalis alkekengi</i> – - <i>Withania somnifera</i>	Winter Cherry Indian ginseng	Güvey Feneri Karga Gözü		

Atropa belladonna

(Deadly nightshade; Güzel avrat otu)

**Herbaceous perennial,
distributed in Europe and
humid forest areas in
Turkey.**

Poisonous!

DESCRIPTION:

Plant 50-200 cm tall, perennial and herbaceous. Stem branched, thin and covered with short hairs. Leaves ovate-elliptic, 2-20 cm long, short pedicellate.

Sepals/petals united with 5 lobes at leaf axils; petals brown-purple or dull-red in color. Underground part is thick. Fruit round, 1-2 cm in diameter, black /cherry in color, juicy, surface glossy; calyx star-shaped and permanent on fruit.

FLOWERING TIME: June-August

DISTRIBUTION and HABITAT:

It is abundant in the Thrace and Black Sea regions and less frequently in the Aegean and Mediterranean regions, at from sea level to 2000 m, usually in shade and under beech tree forests.

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TOXIC PARTS:

All plants, especially leaves and berries

POISONOUS COMPOUND(S):

Atropine, scopolamine and other anticholinergic alkaloids

Datura

stramonium

(Jimson weed; Tatula, boru çiçeği)

DESCRIPTION: 40-200 cm tall, erect, branched, pubescent, annual, herbaceous plant.

Calyx tubular; corolla white and funnel-shaped.

The fruit is walnut size, with a spiny, 4-septical capsule.

FLOWERING TIME:

May-December

DISTRIBUTION AND HABITAT:

In almost every region of Turkey, it grows along road-sides, fields, ruins and ditches.

TOXIC PARTS

The whole plant is poisonous. But poisonings usually occur with the use of seeds. Both dry leaves and seeds are used to obtain hallucinogenic effect.

POISONOUS COMPOUND(S)

Atropine, scopolamine and other anticholinergic alkaloids.

POISONOUS PLANTS Compositae (Asteraceae) FAMILY

It is the richest family of flowering plants, represented by nearly 1000 species and 20.000 species on the earth. Our country grows about 130 genus, more than 1100 species.

Senecio vulgaris (Ragwort, groundsel; Kanarya otu)

-DESCRIPTION: Herbaceous plant extends up to 30-40 cm. While young bodies are hairy, they become hairless as the plant gets older. Leaves are soft, thick and lobed. Bright yellow flowers are in the state of capitula.

-FLOWERING TIME: August-September

-DISTRIBUTION and HABITAT: It is very common in our country.

-TOXIC PARTS: The whole plant is poisonous.

-The milk of animals eating from this plant and the honey that bees make with this plant's nectar contain toxic alkaloids.

-POISONOUS COMPOUND(S): Pyrrolizidine alkaloids.

-Dünyada yaklaşık 3000 **Senecio** türü bulunur. Genellikle boş arazide, yol kenarlarında, çayır

-Toksik madde grubu: Senecio türlerinin çoğu toksik etki yaratacak miktarda **pirolizidin alkaloidi** içerir.