

DETERMINATION OF MORPHOLOGICAL STRUCTURE OF LEAVES

AUCUBA JAPONICA

Rudakova I.B., Khvorost O.P., Skrebtsova K.S.

National University of Pharmacy, Kharkiv, Ukraine

Introductions. *Aucuba japonica* Thunb. - evergreen dwarf shrub 1-3 m in height of the Garryev family *Garryaceae* [1]. Shoots are erect, well-branched, woody, light green. The flowers are small, inconspicuous, collected in hairy panicles, 4-membered, unisexual, dioecious, reddish. Stamen inflorescences paniculate, 7-10 cm, pubescent, broadly ovate or ovate-lanceolate petals. Pistillate flowers are purple or dark red, petals are broadly ovoid or elliptical-lanceolate. It blooms in March-April. Fruits are ovoid red berries 2 cm long and 5-7 mm in diameter. The most commonly cultivated varieties of Japanese aucuba are 'Variegata', 'Dentata', 'Crotonifolia', 'Hillieri' and 'Goldiana'. Aucuba tolerates low air humidity, but still, in a heated room in winter, the plant requires spraying. Leaves and fruits are used in medicine. Aucuba leaves contain active substances: phytoncides mertinel, 3-pentene, 1-hydroxy-3-pentin, benzoic acid, 2 geskenal, aucubin and aucubigenin [2], from other or other substances - shikimic acid, which promote tissue regeneration and have an anti-inflammatory effect. In the folk medicine of East Asian countries, crushed leaves are used to treat wounds and burns. In Japan, Aucuba preparations are considered very effective in the treatment of tumors and diseases of the gastrointestinal tract. aucuba leaves contain aucubin glycoside, which increases the acidity of gastric juice. This is important to remember when decoctions and infusions are used inside. Despite the use of the plant in folk medicine, this plant is very poisonous.

Aim of research. Determination of morphological structure of leaves *Aucuba japonica*.

Methods of research. Raw material - the leaves *Aucuba japonica* were harvested from non-flowering specimens cultivated in native conditions in August 2021. The study was carried out using well-known pharmacopoeial methods for the analysis of medicinal plant materials.

Main results. We determined the color, shape, size of the scales of leaves *Aucuba japonica* are simple petiolate with a valuable blade. Leaves are opposite, simple, without stipules, short-petiolate, leathery, shiny, oblong-oval, whole edge, slightly wavy, pointed apex, rounded or broadly wedge-shaped base, petiole up to, leaf blade 15-20 cm long, wide 4-6 cm wide, with a rounded or broadly wedge-shaped base and a pointed apex. There are often 2, 4, or 6 pairs of thorns at the top of the leaf. The color is dark green, golden yellow dots are present. The odor is weak characteristic. The taste of raw materials was not determined because the whole plant is poisonous

Conclusions. The obtained results confirm the prospects for further pharmacognostic study of the raw materials of *Aucuba japonica*.

Bibliography

1. Баранов М. И. Декоративное цветоводство. Минск, 2012. 167 с.
2. Баженова С. В., Некрасова М. А. Физико-химические методы определения химического состава фитонцидов. Вестник РУДН. Сер.: Экология и безопасность жизнедеятельности. 2005. №1 (11). С. 52-65.