



THE USE OF ROSEHIP FLOWER IN ALCOHOLIC BEVERAGES IN PRODUCTION

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Article history:	Abstract:
<p>Received August 26th2021 Accepted: September 7th 2021 Published: November 9th 2021</p>	<p>Shipovnik (wild rose) is a perennial plant that belongs to the pink family. It is used in various areas of production (pharmaceuticals, food, etc.) In addition to the rose hip fruit, its roots and flowers are also used. Tinctures of asparagus flowers are used to treat a number of diseases and their prevention. Extracts from asparagus flowers are widely used in folk medicine for the treatment of many diseases and their prevention.</p> <p>The purpose of our study was to study the tincture of aspidistra flowers and the prospects for the use of these tinctures in the production of alcoholic beverages.</p>

Keywords: Wild Rose, Flowers, Aspidistra Flowers, Asparagus Flowers

PREPARATION OF RAW MATERIALS

Aspidistra flowers were collected by hand, without damaging the structure, 250 gr. After inspecting and removing the damaged sheets, they were washed and dried at room temperature. Some of the dried flowers were used raw (100 g), and some were placed on drying (100 g).

DRYING PROCESS

Drying was carried out at a temperature of 20-25 ° C in a dark place. The flowers were laid out in a layer 5 cm thick, which we periodically mixed. The process lasted 2 months, during which we controlled the dynamics of moisture removal by weight. The dynamics of moisture loss during drying is presented in Table 1 and Figure 1.

Table 1.
Dynamics of moisture removal from aspidistra flower

Day 7	Day 14	21day	Day 28	Day 35	Day 42	Day 49	Day 56
96,7	94,1	91,2	88,5	85,7	83,2	82,4	81,1

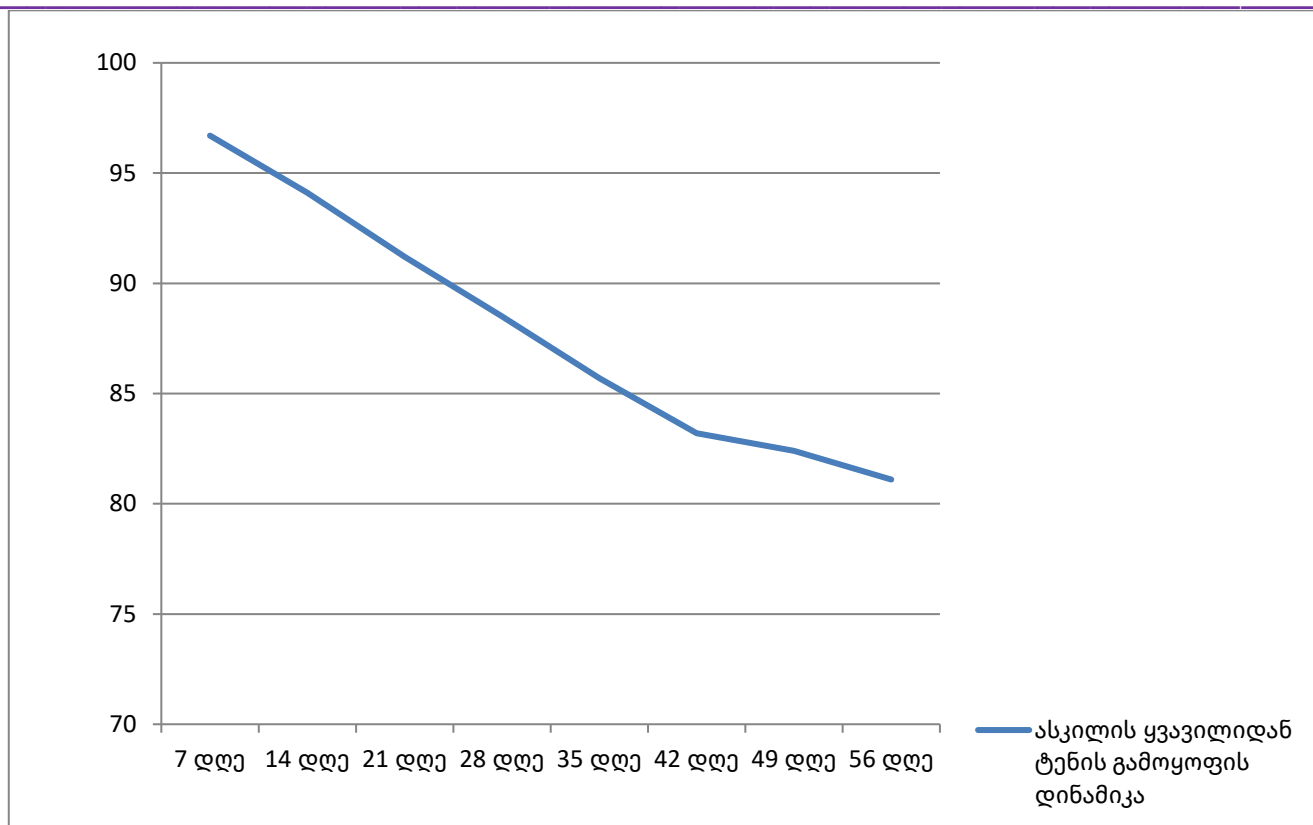


Figure 1. Dynamics of moisture removal from the flower of ascidia.

As can be seen from Table 1 and Figure 1, the process of drying the ascidia flower was intense for 6 weeks, during which time 16.8 g of Tennis evaporated.

PREPARATION OF TINCTURES

We prepared a tincture of raw flowers immediately after harvesting and at the end of the drying process. In both cases, the extraction conditions were the same:

- Extractant - 20% alcohol solution;
- Extractant-to-raw material ratio 2:1;
- Delay temperature - 20-25 ° C;
- Delay period - 28 days.

As a result, we obtained two samples:
 Scheme 1 - tincture made from raw flowers;
 Sample 2 - Tincture of dried flowers.

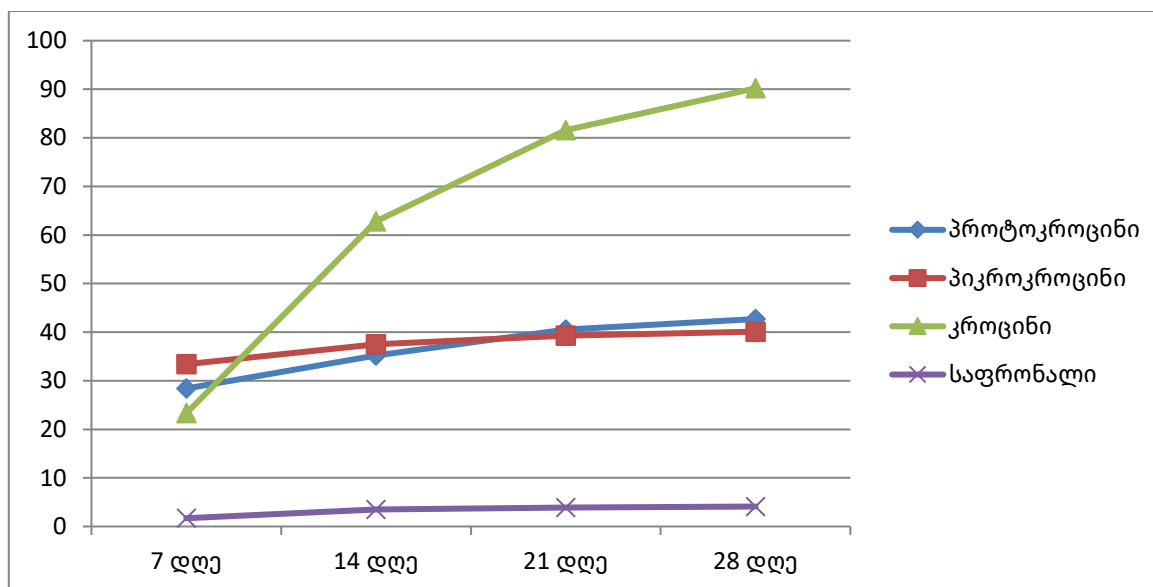
The obtained tinctures passed an organoleptic examination, as a result of which it was found that the tincture obtained from dried raw materials does not differ in taste, unlike tincture of raw flowers, which has a light lemon color, has a delicate consistency. at the same time intense aromas of roses, violets and meadows. In the process of preparing the tincture, we studied the content of some of its most important biologically active substances, such as protocrocin, crocin, picrocrocin, safronal. Protocrocin is a carotenoid glycoside that accumulates with the growth of many plants and their fruits (saffron, savory, mulberry, etc.). After collecting the plant and/or its fruits of the essay, as soon as it stops growing and the physiological processes in it slow down or stop, it turns into relatively simple glycosides - crocin and picrocrocin. Safron is the result of the conversion of picrocrocin. It is characterized by a high content of antioxidants and activity against free radicals.

The above substances were detected once every seven days. The results are presented in Table 2 and Figure 2.

Table 2

Dynamics of changes in the quantitative content of protocrocin, picrocrocin, crocin and saffron in the process of tincture

Name	quantity			
	7 days	14 days	21 days	28 days
Protocrocin	28,4	35,2	40,5	42,7
пикрокроцин	33,4	37,5	39,3	40,1
crocin	23,3	62,8	81,6	90,2
safronal	1,7	3,5	3,9	4,1



- 1 Protocrocin
- 2 Picrocrocin
- 3 Crocin
- 4 Safronal

Figure 1.

Dynamics of changes in the quantitative content of protocrocin, picrocrocin, crocin and safrone in the process of preparing tinctures

As can be seen from Table 2 and Figure 2, crocin was transferred from the largest amount of raw materials in the process of preparing the tincture of the Aesculus flower, and its amount was 90.2 mg / l after 4 weeks. As for protocrocin, picrocrocin and safrone, their number increased slightly.

Given the color and taste of the resulting tincture, in the next step we checked the content of sample 1 on crocin, after which it was found that the amount of crocin in the tincture is 90.2 mg / l.

The organoleptic properties of the tincture allow you to use it both independently - in the manufacture of cocktails, and in the production of liqueurs and aromatic wines in the blend. With its help, the drink will receive not only a rich bouquet, but also such a biologically active substance as crocin.

LITERATURE USED;

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