

Research Article

Economic benefits species of the introduced of genus *Malva* L.

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Abstract

Article is devoted to the economic value of introduced *Malva* L., grown either alone or in mixed crops. Years of research has shown that the species of the *Malva* genus with minimal overwrite sown area give a high yield of nutrients at the same time their crop, both individually and in mixed agrophytocenosis gives high economic profit (46,8\$-56,60\$).

Introduction

Stable production of high plasticity of the species belonging to the family Malvaceae biomass and, more generally, to ensure efficiency, but also allows them to grow crops at different times. Also the weather is not a high rate, the ratio increases, the presence of long-lived (perennial species), mixed with other crops kulturalarla capacity, resistance to diseases and pests, and high economic efficiency and etc. properties of introducients to create conditions to achieve.

The effectiveness of the dry matter of feed crops, feed unit, protein yield, their cost prices, production, and net income due to high rate of return. The long-term studies have shown that the type of family unit area *Malva* with minimal cost, high output of nutrients, as well as their same-sex and mixed cultivation of agrophytocenosis provides a high degree of revenue and profitability.

It was determined on the basis of literature sources about introducients and perennial drought tolerant [Zaycev, 1962], high productivity and agro-chemical properties of the soil to be a strong root system improves [Eryashev 2003; Rakhmetov, 1995].

With this in mind for the first time in the ex situ cultivation in the country that could come from *Malva* species was calculated.

Materials and Methods

Research areas that have been introduced and spread the seeds of wild flora of the genus *Malva* obtained *M. erecta* Presl., *M. nicaeensis* All., *M. pusilla* Sm., *M. parviflora* L. v *M. sylvestris* L. In this case, different methods have been used in the literature sources [Marchulenis, 1968; Rakhmetov, 1998]

Using biochemical methods [Yermakov and etc., 1972] studied the quality of forage plants.

The comparative method introducentl ri families beans, corn, turnips, etc. v z r k. economic evaluation [Medvedev, 1991]. Method of planting, fertilizer effects, depending on the time and various other agricultural methods of cultivation species of the agrophytocenosis homogeneous and mixed effectiveness studied [Moroshan, 1971; Korsakov, 1975].

Results and Discussion

The long-term studies have shown that the type of mallow high output unit area of nutrients with minimal cost, at the same time, same and mixed agrofitosenozlarda cultivation of high-income, as well as provide a rate of return (table 1).

Table 1 Economic efficiency of growing of *Malva* introducants

Parametrs		Species of <i>Malva</i> L.		
		<i>M.sylvestris</i>	<i>M. nicaeensis</i>	<i>Malva parviflora</i>
Productivity	ha/t	53,98	40,37	35,29
1ha detection area	Feed unit, t	8,91	6,58	5,82
	Protein, t	2,10	1,46	1,22
flow field from 1 ha (\$)		18,72	18,39	17,00
cost	green mass	0,34	0,42	0,48
	feed unit	2,10	2,52	2,91
	protein	8,91	12,51	13,92
income from 1 ha area (\$)		88,20	53,72	40,57
rate of return %		18,36	14,41	11,80

As seen from the table completely pay all the expenses of the funds introducants of *Malva* genus. Genus of annual and biennial crops to feed growing on porous introducants are considered to be effective. During investigations it was

found that the types of *Malva* to *Crucifera* family (*Raphanus sativus*, *Barbare vulgaris*, *Barbare plantagianea* and *Lepidium sativum*) is higher than the economically efficient (Table 2).

Table 2. The economic efficiency of cultivation of mixed forest crops of *Crucifera* and *Malva*

Parametrs		Agricultural plants				
		<i>Raphanus sativus</i>	<i>Barbarea vulgaris</i>	<i>M.sylvestris</i>	<i>Barbarea plantagianea</i>	<i>Lepidium sativum</i>
Parametrs		17,43	12,87	25,37	21,07	19,53
1ha detection area	Feed unit, t	2,09	1,48	3,32	2,36	2,25
	Protein, t	0,37	0,29	1,00	0,73	0,66
flow field from 1 ha (\$)			2,48	3,67	2,84	2,98
cost	green mass	0,19	0,19	0,14	0,14	0,15
	feed unit	1,66	1,68	1,10	1,20	1,32
	protein	9,38	8,57	3,67	3,89	4,51
income from 1 ha area (\$)			12,16	29,19	20,52	19,29
rate of return %			24,21	39,37	35,75	32,03

Cultivation of introducants is directly related to the impact of the economic efficiency of mineral fertilizers [Ibadullayeva et al., 2013], we have determined that the

Forest Malva example, for the cultivation of green fodder yield leads to an increase in the fertilizer nutrients (table 3) increase economic efficiency

Table 3 The economic efficiency of the application of mineral fertilizers under the green mass production of *Malva sylvestris* species

Variants	Prod./t/ha	flow field from 1 ha		Cost of money for 1 ha \$	Cost / \$			The total value of the field 1ha \$	income from 1 ha area \$	rate of return %
		Feed	Prote-in, t		Green mass	Feed unit	rate of return %			
Fertilizer	42,0	6,46	1,44	5,61	0,13	0,86	3,89	63,95	58,34	51,48
N ₉₀	69,0	9,92	2,46	9,37	0,14	0,94	3,81	98,20	88,80	46,87
P ₉₀	56,0	8,38	2,03	14,78	0,26	1,76	7,27	82,96	68,17	22,82
K ₉₀	52,2	7,87	1,93	8,84	0,16	1,23	4,57	77,91	69,07	38,68
NP ₉₀	65,2	9,70	2,46	18,55	0,28	1,91	7,52	96,03	77,47	20,67
NK ₉₀	62,5	9,20	2,37	12,60	0,20	1,37	5,29	91,08	78,47	30,81
PK ₉₀	54,7	8,31	2,05	18,00	0,32	2,16	8,76	82,26	64,25	17,62
NPK ₆₀	66,1	10,11	2,49	16,38	0,24	1,62	6,53	100,08	83,70	25,27
NPK ₉₀	74,4	11,03	2,79	21,78	0,29	1,97	7,77	109,19	87,41	19,86
NPK ₁₂₀	80,4	11,12	2,91	27,16	0,33	2,44	9,33	110,08	82,91	15,09

Mixed with a blend of high-yielding maize crops in one year is considered Malva. One of the important issues, some widely cultivated species of the protein solution to the imbalance in the feed unit. One such species of maize. Depending on the phase of the development of maize 30-50 grams of protein in 1 feed unit is the solution. It is possible to apply different methods to solve the problem, one of them a mixture of short- corn crop cultivation of high protein cultural.

Possess a broad spectrum of distribution of these crops are a number of reasons as before and corn are grown. A number of slow-growing annual species of the mallow genus and with corn mixture of traditional and yuks kzulalli cultures to determine the comparative advantage as a component of the protein of malva will allow planting. Whether productivity, as well as the composition of dissolved

protein-mallow mixture of corn is superior to all other additives. We have our own research proved it once again. Through malva the feed unit reaches the 100-120 grams (according to the dissolved protein).

The long-term studies of traditional cultures and high protein *Malva* mixed with corn, birsirali, attached to the effectiveness of cultivation of crops have been identified. All cases are considered more effective than introducers of *Fabaceae* highly productive species of mallow. For example, sometimes a mixture of species of mallow introducers crops of corn, soybeans, feed of *Fabaceae* and economic efficiency of the mixture was determined. During the period of 1 ha, the mixture used for the use of green fodder area was observed in the high-yield corn mixture of types of mallow (Table 4).

Table 4. Together economic efficiency of mix introducers of mallow and corn crops, soybeans and alfalfa

Variants	Productivity t/ha	yield of 1 ha field		1ha consumption \$	cost \$			income from 1 ha area \$	rate of return %
		Feed unit,t/ha	Protein, t		Green mass	Feed unit	Protein		
Corn + clover control	45,27	6,90	1,06	24,87	0,54	3,60	23,46	43,43	7,30
Corn + soybean control	44,15	7,24	0,97	24,27	0,54	3,35	25,02	47,39	9,66
Corn + <i>M. erecta</i>	52,04	8,13	1,49	23,88	0,45	2,93	16,02	56,60	11,73
Corn + <i>M. sylvestris</i>	50,19	7,61	1,29	23,83	0,47	3,13	18,47	51,50	10,70
Corn + <i>M.parviflora</i>	48,72	7,66	1,32	23,78	0,48	3,10	18,02	52,04	10,83
Corn + <i>M.nicaeensis</i>	47,65	7,33	1,21	23,76	0,52	3,24	19,63	48,75	10,16
Corn+ <i>M.pusilla</i>	45,81	7,06	1,11	23,70	0,51	3,35	21,35	46,18	9,64

All versions of pulses per unit area yield components of corn *Malva* food items was observed with the mix. For 1 ha with a consumption of raw materials, most of which are a mix of corn and soybeans to feed of *Malva* of *Fabaceae* cost is very low. Green mass, protein and feed corn of *Malva* blend in with the lowest unit which was recorded versions. Low productivity and profitability at the expense of mallow high rate of net income is provided.

During the same laws as well as the use of corn for silage can be observed during the interaction of high protein cultural.

In general, the use of green mass was significantly higher than economic efficiency. The highest yields of corn crops in mixed of Malva - *M.parviflora*, *M.pusilla*, *M.nicaeensis*,

M. sylvestris *M. erecta* species and variants which have been recorded. All types of Malva of forage yield per unit of protein is much more than the corn mixture of cultural pulses. Most of the cost of consumables were observed in mixed plantings of corn planting of *Fabaceae*. *Malva* crops mixed with the option to check out the figure is much lower compared to. The cost of the green crowd, feed unit and with a blend of protein observed in the indicator is at least *M. erecta* corn. This *Malva* mixed fodder crops, even high come clean and provide a degree of profitability. The highest rate of net income and profitability, which is a mixture of corn variants of *M. erecta*. It should be noted that these species of do Ganja-Kazakh territory. But other regionlard spread in Azerbaijan. Seeds have been found in other regions, too.

We believe that in the future of the new varieties and hybrids in relation to a number of forest-zoning of the surrounding landscapes, at the same time, using the results of these studies conducted agroclimatic areas, including the *Malva* genus highly important perspective on the types of feed materials collected all of them as the mass cultivation of agricultural products will allow you to solve. Biomorphological characteristics of the breed and biennial species, forage qualities, the use of cultures, interaction with other species, soil productivity, and so on. The influence of the important issues have already been resolved as.

The cost of the product at the same time the options were lower than with other types of corn mallow.

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