

***LAGERSTROEMIA INDICA* L. HIGHLY EFFECTIVE MEDICINAL PLANT  
INTRODUCED TO UZBEKISTAN**

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**Abstract:** *Lagerstroemia indica* L. consists of anti-inflammatory, analgesic, antipyretic, antiox, antitumor, antimicrobial, anti-Alzheimer's, antidiabetic, and hepatoprotective effects of antithrombin. 1,3,5-trimethylbenzene, n-undecane, pelargonaldehyde, n-dodecane, 1,1-dibutoxybutane, triacetyl glycerol, 4,4,7 a-trimethyl-5,6,7,7 a-tetrahydrobenzofuran-2 (4H)–one cis-pin I have, neophytadiene, chlorpyrifos, alkaloid, cardiac glycosides, body dementia, saponinlar, sterols, triterpenes, anthraquinones, reducing compounds, flavonoidlar (flavanones/dihydroflavonols, and chalcones) and phenolic glycosides. The article discusses the chemical composition, pharmacological effects of L Lagerstroemia indica and components are discussed.

**Key words:** Indian sirey, introduction, chemical composition, components, technique, and me, pharmacology, cholecystitis, flavonoidlar, cholesterol, antimicrobial agent, Alzheimer's disease, hypoglycemic, cancer, antithrombin with diabetes.

**Annotatsiya:** *LAGERSTROEMIA INDICA* L. tarkibida yallig'lanishga qarshi, og'riq qoldiruvchi, isitmani tushiruvchi, antioksidant, antikanser, antimikrobyal, altsgeymer, antidiabetik, gepatoprotektiv va antitrombin ta'sirlari aniqlangan. 1,3,5-Trimetilbenzol, n-Undekan, Pelargonaldegid, n-Dodekan, 1,1-Dibutoksibutan, Triatsetilglitserin, 4,4,7a-trimetil-5,6,7,7a-tetragidrobenezofuran-2(4H)–on, sis-Pinan, neofitadien, xlorpirifos, alkaloidlar, yurak glikozidlari, taninlar, saponinlar, sterollar, triterpenlar, antrakinnonlar, qaytaruvchi birikmalar, flavonoidlar (flavanonlar/ digidroflavonollar va xalkonlar) va fenolik glikozidlari saqlaydi. Ushbu maqolada hind lagerstremiyasi *Lagerstroemia indica* L. ning kimyoviy tarkibiy qismlari, komponentlari va farmakologik ta'siri muhokama qilindi.

**Kalit so'z:** Hind lagerstremiyasi, introduksiya, tarkibiy qismlar, komponentlar, ahamiyat, farmakologiya, xolitsestit, flavonoidlar, xolesterin, antimikrobyal, altsgeymer, gipoglikemik, saraton, antitrombin, qandli diabet.

**Аннотация:** *Lagerstroemia indica* L. обладает противовоспалительным, обезболивающим, жаропонижающим, антиоксидантным, противоопухолевым, противомикробным, противодействием болезни Альцгеймера, противодиабетическим, гепатопротекторным и антитромбиновым действием. 1,3,5-триметилбензол, н-ундекан, пеларгональдегид, н-дodeкан, 1,1-дibутоксибутан, триацетилглицерин, 4,4,7a-триметил-5,6,7,7a-тетрагидробензофуран-2 (4H)–он, цис-пинан, неофитадиеи, хлорпирифос, алкалоиды, сердечные гликозиды, дубильные вещества, сапонины, стерины, тритерпены, антрахиноны, восстанавливающие соединения, флавоноиды (флаваноны / дигидрофлавонолы и халконы) и фенольные гликозиды. В статье обсуждаются химический состав, компоненты и фармакологические эффекты *Lagerstroemia indica* L.

**Ключевые слова:** Индийская сирень, интродукция, химический состав, компоненты, значение, фармакология, холецистит, флавоноиды, холестерин, противомикробное средство, болезнь Альцгеймера, гипогликемия, рак, антиромбин, диабет.

**The research of the object:** in the region Kashkadarya oshrilayotgan creative work done as a result of the creation of new settlements and places to decorate with ornamental plants, local climatic factors due to the ornamental plantplanting of products at the expenseapplied at Naykosaguldoshlar (Luthraceae L.) belonging to the family *Lagerstroemia indica* L.to make introduktsiya.

**The research on the subject:** Qashbalm until the region's ownspecific iga climate conditions, qurg'urwhite weather, may oyidanoq who started scorching hot, a dry winter, the cold, wet weather that lackto likely ornamental plantslarning increase the range of.

**The research of the method:** Profi. L.H. Head yoziev oasis introduktsiya made in the context of ornamental trees and shrubs, the number increased significantly. In the same way, the number of ornamental plants Naykosaguldoshlar (Luthraceae L.) belonging to the family *Lagerstroemia indica* L.to introduktsiya and breeding methods.

Structural extract analysis Agilent 7890AGC xromatografik gas mass-spectrum Agilent 5975 ms not onl will determine the quality of ditektoirida.

The mixture components in the separation of HP-5 SEEMS (I'm 30× and 250 μm × 0.25 μm) quartz capillary columns in temperature mode: 50 °s (2 min) – 10 ° S (shock 200 min °s (6 min) – 15 ° / min to 290 from ° S (15 min) 1 ml of the sample (geksan and benzene) the phase of h flowspeed indicator arakat 1.3 ml/min. The components are mass-spectrum characteristic of W8N05ST.L I NIST08. The electronic library, were determined on the basis of comparison with the data.

**The scientific research of the news:** Opening Qashqadaryo region introduktsiya made in the context of *Lagerstroemia indica* L.'s natural and cultural areal of be applied in agriculture, importance, pharmacological effects, ximiyaviy composition of compounds, components: alkaloids, cardiac glikozidi of tannins, saponinlar, sterollar, triterpenlar, antraknonlar, reducers combination of flavonoidlar anti-inflammatory, analgesic, antipyretic, antioxidant, anticancer, antimikrobial, against alzheimer's disease, antidiabetik, the effects of antitrombin gepatoprotektiv andto the results of a related studydi.

The representatives of this category is grown in tropical and subtropical countries in the form of a shrub or small tree. Category linney his friend karl the great scientists systematic Lagerstrem Magnum (magnum lagerstroem v.) called in honor of the same name. There are 30 types of category. Lagerstroemia flor its type 3 – regenae Retro, Lagerstroemia speciosa (Linn) Persia. and Lagerstroemia indica Linn. I am belonging to subtropical regions of the world are grown in the country and many madaniylashtirish [1].

Category 2 type in the cis countries l. lagerstroemia – Lagerstroemia indica and Lagerstroemia speciosa, I would iqlimlashtirish in enough resistance to frost, because of this from both species only, without lagerstroemia indica cultural moslanishshib wide spread [2].

Category humid subtropical climate according to the representatives of lagerstroemia l. belonging to issiqqa air humidity and demanding. This regard from hot and subtropical lands in common. Category in india 12, type 3 Malaziyada, australia as well as certain types of Hindixitoy, new guinea and is common in madagaskar. Some types and janbiy occurs in china [3,4].

Lagerstroemia indica l. – natural without central and south-eastern china, as well as in the territory under hindixitoy from south korea, japan, taiwan, the philippines and in the island a number in southeast asia, and india grows in [3,4]. (4 . A. L. Korkeshko, 1968).

The world scientific literature with the following name be called hoccurs at: *English*: ward el-kahwa, Poison katheb kahwa, Brenjik, Lailak hindi, hindi to xin; *Barazil*: escumilha; *Bengal language*: chhotojarul pure, fara; in *English*: ziwei; *English*: India krape-mirtles, crepeflower the crepe-mirtle roses as *Frantsuzcha*: Lilasdété, lil ind des with an endless, Myrte de crêpe; *Nemischa*: chinesische Kräuselmirte; *Indian language*: fara to Xarsingar, Furush, sao the, the, the Telingachina; *Italy*: alber di san Bartolomeo, Lagerstremiya; *English*: Indiyaskaya sirey, lagerstremiya indiyaskaya; *Spain*: Figures de Jupiter, krespo have Espumilla, Jupiter, LasIndias de Lilac, Lilac del fighting, Melindres; Swedish: lagerströmiya; *English*: Oyaağacı is called with the name of [5].

This type Qashadaryo of the region until may generate a wonderful landscape in the context of introduktsiyalashtirilgan in plants, beautiful flowers, unique, distinctive appearance, incredibly different gultojbarglarining-term and long-term prosperity of the area to be in color with the difference of type is distinct and separate.

This unique and unusual, flowertojbargvery rich color type bush s much to ilgaridan starting introduktsiya, in particular, were multiplied the seed of plants grown in the botanical garden of batumi Batumi, Suxumi, Tibilisi, deployed to the city of erevan. The plants should be adapted to climatic factors, in particular to its much more here, Alushtagacha from the south of the crimea, the black sea, batumi, many of which are grown as ornamental plants in the regions from the edge of Tuapsedan. The regional station originally vakhsh in tajikistan were brought in 1936 from the usa, the seeds of plants, and growth are. The year is 1951 from dushanbe are grown in the botanical garden. Qualification demands 1961 through here planting seeds red, reddish, pink, light pink and white color are the same that shall be revealed in the growth of .

Tashkent for the first time to the conditions of the work in a way 1936-1939 mass reproduction, and these experiments gave positive results.

Were increased to the places that are deployed, but in these plants , most of 1967-68 years qahraton was going to hit the cold of the content . This is preserved in some ekzemplarlardan tashkent botanical garden. At the same time, in the tashkent botanical garden daraxtsimon ekzemplar, 2-3 dumpling bush has been the growth of the same. Also, the republic DXX Lagerstroemia indica l. and saved next to the building alleyada grow bush 20 seeds has. On the other hand we incurred given seeds, I and they, professor from This.P. Pratorov "Botanical" SPE bostanlyk district and village next to the main building that grow in humsongan ekzemplarlar still barq's beating up.

Denov in uzbekistan, southern iqlimlashtirish am originally in 1935. Now Bandixon nursery, in the city of Termez Denov and are also grown.

According to studies, as a medicinal plant *Lagerstroemia indica* L. farmokologik have different effects on central nervous, cardiovascular, antioxidant, reproductive, improves the work of the gastrointestinal tract, against diabetes, anti-cancer, anti-inflammatory, analgesic and antipiretik (against fever), nefro (kidney failure treatment) and gepato (xolisestit antispazmatik gepotoprotektor effects and production), protektor enriches normal activities of the liver and improves digestion. It is removable main alkaloid analgesic, and antioxidant effects antispazmatik have separate and removable from the content of the extract helps to improve gepotositlarni to update the functioning of the liver. Also, to protect the body which urolitik and diuretics, and antimikrobial antiparazitik, antiprotozoal, zamburug birth, but by the effect of insecticidalhas information on rollers .

Traditional folk medicine in ilgaridan much *Lagerstroemia indica* L. plant of different parts I root I, bark, leaves, I flowers and I control the medicine from the medicinal properties according to your blood pressure, urine production function to improve, strong urine xaydovchi, the kidney this cleaner arms, to go in the treatment of constipation, as a means of pain relievers, the amount of cholesterol control a bowel movement engillashtiruvchi means in the treatment of diabetes are highly effective medicinal plant as widely have been applied. The seeds I alkolo strong sedative idler (drug) was used as the substance. Bark and shell and stimulants tushuruvchi fever, leaves I and flowers from ida to cleanse the body root I connective and detoksikant (various toxic substances, the toxic chemical for the purpose of neutralization) the quality of fati used .

In the literature, *Lagerstroemia indica* L. the chemical composition of about, alkaloids, cardiac glikozidi of tannins, saponinlar, sterollar, triterpenlar, antrakionlar, reducers combination of flavonoidlar and phenolic glikozidlar er (strossid a-c) the presence of this simlik the dry ingredients 22,53% protein, carbohydrate 37,25% and ash 12,23 g% weight established diagnosis I shiet, the minerals of the analysis I the plant in the structure of potassium, calcium, magnesium, phosphorus, the organization of a numerous amount of sodium and sulfur I about information keltiriladi Poyasidan allocated phenolic formations included the following: strossid a, b and c, 9,9-digidroksi-at 3.4-metoksilendioksi-3-meto, tamoxifen[7-O-4-8-5]-neolignan, digidrodegidrokoni feril alcohol, glyukopiranozid, gliserol, glyukopiranozid, glikoliz piranozid, A alatusol fikusol, evofolin-b and consists of compounds such as marfenol. Also, poyasidan triterpenlar: lagerindisid, kvadranozid, betulin acid, 3b-asetoksiolen-12-en-28-acid, 28-O-glyukopiranozid, oleanolin acid, fatty acid, 23-digidroksi-1-oks-olein-12-en-28-acid oxide separated from the stem. *Lagerstroemia indica* L. a total of twenty five types of substances separated from the extract from the leaves fenol. These substances are identified from pirogallol, south acid, 4-aminobenzoik acid, protokatchuk acid, katexin, katekol, n -alkali benzenein acid, acid xlorogen, vanilla acid, n- kumarn, acid, acid feruz, izo-feruz acid, vanilla acid-kumarin acid, benzoy acid, salitsil, pentasiklik triterpenoidlar and 3 beta-trio 12-die-3-alkali and lageflorin, bifetil bifetil xinolizidin and n-oxide may be the dean of alkaloidi, as, dekodin, digidrokillatin, and camp may be allocated alkaloidi lagerstroemin. 5-epidigidrolefolin and his sterioizomeri, separated from the upper part of the land as digidrolifolin. Flavonoidlar luteolin-6-arabinoz-8-glucose, luteolin-6-glucose-8-arabinoz, apigenin-6-arabinoz-8-glaktoza, apigenin-6-ramnoza-8-glucose, apigenin-6 - glucose-8 - ramnoz, luteolin-7-glucose, gisperidin, ruth may, apigenin, kampferol, naringenin, kampferol-3- (2-n-kumar) glucose, gespertin, apigenin, apigenin-7-glucose, asatsetin sa in the structure of the pros haqida's information.

Pharmacological effects I: fruit of the division ko'sakcha a lot if you have used it tayyora ethanol extract not only be spiritually healthy and lig'lanishga against antipiretik – fevert to tushuruvchi stabillashtiruvchi or effect of having to be detected.

**Toxic fuction:** evofolin-B is a combination of A C moore marfenol alatusol fikusol and the combination of bad shwork against the effects of studying when the leaves obtained from the swelling of the paws of rats extract polisaxarid return to theat, as well as the top of the body antioksidat flower cleaning activity at and I will help you determine.

Anti-cancer effects: Indian lagerstremiyasi poyasidan allocated ten of triterpen glikozid, fenol two the surge of strong impact with adigan tsitotoksiklik determine gan: A549 (*non-small cell lung karsinomasi*), SK-HUNT-3 (*ovarian mali's what atsof dogs*), SK-MEL-2 (*skin for*



*lagerindiol*), which is NCT-15 (*colon adenine karsinomasi*) and *pterospermin A* has than apply showed a positive result.

Antimicrobial effects: Leaves removable separate from the methanol extract of capital according to the results of the assessment of the effects against the development rob, (*staphylococcus aureus* (ATCC 8095), *Salmonella enteritides* (ATCC 13076), *Escherichia student* (ATCC 25922), *listeria monocytogenes* (ATCC 15313) and *can open albicans* (ATCC 10231). interaction effects demonstrate active against mikroblargauvchi pure active compounds, 4-meto apigenin, tamoxifen-8-c-b-d-glyukopiranozid; tsitisozyd be kept like substances and against all tested microorganisms identified effective the struggle. *Albicans can open* that will die against minimal kontsentrasiyasi of the mixture (MLC = 32 mg / ml), *staphylococcus aureus* (MLC = 16 mg / ml), *Salmonella enteritidlari* (MLC = 16 mg / ml), *Escherichia student* (MLC = 16 mg / ml) and *Listeria monotsitogen* at (MLC = 16 mg / ml) has been proven on the basis of analysis. Bark, leaves and fruit antimicrobial of active broadcast will xloroform, methanol gram-studied positive (*staphylococcus aureus* and *bacillus subtilis*), none of the two gram-negative (*Escherichia student* and *pseudomonas aeruginosa*) bacterial strains and two strains zamburug (*as A. oryzae* and *a.*). Maximum antibacterial effect of the bark ( $41,33 \pm 0,88$  mm), while the leaves are broadcast *pseudomonas aeruginosa* ( $49,33 \pm 0,66$  mm) against other thanal influence will determine.

Alzheimer's disease against 80% ethanol extract influences on pricesaid. Slopes of aluminum chloride ( $AlCl_3$ ) al are enforced by thegamers disease (ED). norepinefrin on the level, the atsetilxolin esteraza, dopamine and serotonin the level of the violation of the leaves extract treatment with the results of the incidence of ed as compared to rats in the level of perceived called by their identified to improve operation .

Gipoglikemik effects: the effects of content of methanol extract of leaves in gipoglikemik studied polisaxarid (extract a) the lower the amount of glucose in rats with diabetes diagnosisrollers 4 and 8 weeks, respectively 22,5% and 44,9% glucose alreadyjasi 32,2% 58,2 by and by%.

30 xromogen prepared from plants to determine the state of florida, antitrombin active, metilen chloride and methanol extract demonstrated when 80% or higher antitrombin active atthe show, only to be proven.

Datan seeina demonstrates, the world's many mamlatkatlari: China, Korea, Japan, India, Iran, Pakistan, Georgia and in the usa from the medicinal properties of his whole body were used. Bark, leaves, flowers drive the fluid from seeds obtained qualification demands a substance that quickly calming affects. The roots are used as stimulants. Raw fruit gipoglemik a rich substance of insulin to 6-7.7 supports equal. *Lagerstroemia indica* L. in the structure of the substances used in perfumery and cosmetics sonoatida there is no information about hushbuy. Therefore, the k from the information listedon thisrinadiki, in the whole world *Lagerstroemia indica* L. from different parts of maqsa all are widely used. According to the data in order to enrich the gene pool of the territory as unique ornamental plant Qashqadaryoga introduktsiya made from this type of economic analysis was conducted in order to study the significance of the structure ximiaviy the first time and for the first time studied in the context of Kashkadarya o'stirilayotgan ekzemplarlarning ximiaviy components.

To do this, essential oils of leaves and flowers in the glass tube and dried for 3 hours klevendjer nasadka when shaken, by way of analysis of the samples obtained before returning to gidrodistillash until 4 °C. in a sealed tube was stored.

Extract has been formed analysis Agilent 7890AGC xromatografik gas mass-spectrum Agilent 5975 NOT onl MS will determine the quality of ditektorida.

According to the results of the analysis type is a combination of extraction and most of them in the general account level 12 ximiyaviy ts-pin I (42,84%), xloropirifos (26,49%), triatsetilgliserin (15,08%) will be detected up to. The total amount of the allocated components 98,67% made up.

Based on the above information, *Lagerstroemia indica* L. 's taking into account that are rich in biologically active substances, chemical compounds obtained and their significance next have plans to continue her research.

To conclude, *Lagerstroemia indica* L. Qashqadaryo region conditions and Iat full introduktsiyalashtirilgan are grown in this area and ekzemplarlar chemical analysis of the results, I use this type diapozoni colossal that are very wide, not only these features, which can enrich the gene pool of our republic, the population aesthetic pleasure allowing, places used in the planting of a unique type, as it can be used freely, but also in agriculture, in medicine, pharmacology - anti-inflammatory, analgesic, antipiretik, antioxidant, anticancer, antimikrobal, alzheimer's, antidiabetik, and the effects of antitrombin gepatoprotektiv wide basis is to be applied on a candi.

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