

**THE OPTIMIZATION OF ISOLATION OF ALKALOIDS
AND OTHER EXTRACTIVE COMPOUNDS FROM
CONVOLVULUS SUBHIRSUTUS (CONVOLVULACEAE)**

© **D. B. Kadirova, N. I. Mukarramov, S. F. Aripova,¹**

Kh. M. Shakhidoyatov

Institute of the Chemistry of Plants Substances Academy of Sciences

of the Republic of Uzbekistan, Tashkent

¹E-mail: salima_aripova@mail.ru

REFERENCES

1. Gapparov A. M., Razzakov N. A., Aripova S. F. 2007. Alkaloids of *Convolvulus subhirsutus* Rgl. et Schmalh. from flora of Uzbekistan. — Khimiya prirodnikh soedineniy. 1: 242—243. (In Russian)
2. Zhukovich E. N., Zinevich T. L., Tolkachev O. N. 2004. The study of alkaloid composition of oil extracts of *Chelidonium majus*. — Farmatsiya. 1: 22—23. (In Russian)
3. Adekenov S. M. 2010. Environmentally friendly technologies in the production of drugs. — Vestnik KazNU im. Al-Farabi. Seriya khimicheskaya. 4(60): 216—220. (In Russian)
4. Vvedenskiy A. I. 1961. Sem. *Convolvulaceae* — Vyunkovye [Fam. *Convolvulaceae*]. In: Flora Uzbekistana [Flora of Uzbekistan]. Tashkent. Vol. 5. P. 123—138. (In Russian)
5. Gapparov A. M. 2010. Alkaloidyi rasteniy *Convolvulus subhirsutus* Rgl. et Schmalh. i *Convolvulus pseudocanthabrica* Schrenk., proizrastayuschih v Uzbekistane: Avtoref. diss. ... kand. khim. nauk [Alkaloids of plants *Convolvulus subhirsutus* Rgl. et Schmalh. and *Convolvulus pseudocanthabrica* Schrenk., growing in Uzbekistan: Abstr. ... Diss. Kand. (Chemistry) Sci.]. Tashkent. 25 p. (In Russian)
6. Sagdullaev Sh. Sh., Sagdullaev B. T., Gapparov A. M., Aripova S. F., Nechmireva T. S., Sultanov S. A. 2008. Sredstvo, obladayushcheye antimicrobnoy, protivogribkovoy aktivnostyu i sposob yego polucheniya [Remedy having antimicrobial, antifungal activity and preparation method there of]: Pat. IAP 04423 (12.08.2008). (In Russian)
7. Gapparov A. M., Okhunov I. I., Nechmireva T. S., Khuzhaev V. U., Aripova S. F., Abdilalimov O. 2013. Alkaloids of plant *Convolvulus subhirsutus* and their antimicrobial activity. — Uzbekskiy biologicheskiy zhurnal. 5: 10. (In Russian)
8. Sagdullaev B. T., Aripova S. F., Shakhidoyatov R. Kh., Okhunov I. I., Abdukhalilova G. K., Gapparov A. M., Khuzhaev V. U. 2011. Razrabotka antimicrobnogo i protivogribkovogo preparata «Konsubin» [Development of antimicrobial and antifungal drug — «Konsubin»]. In: Materialy konferentsii «Aktualnye problemy razvitiya khimicheskoy nauki, tekhnologii i obrazovaniya». Nukus. P. 63. (In Russian)
9. Konichev A. S., Baurin P. V. 2011. Traditional and modern methods of extraction of biologically active substances from plants: prospects, advantages, disadvantages. — Vestnik MGOU. Seriya estestvennyye nauki. 3: 49—54. (In Russian)
10. Chueshov V. I., Gladukh E. V., Lyapunova O. A., Sayko I. V., Sichkar A. A., Ruban E. A., Krutskikh T. V. 2010. Promishlennaya tekhnologiya lekarstv [Industrial technology of drugs]. Kharkov. P. 208. (In Russian)
11. Shiretorova V. G., Khanturgaev A. G., Zalutskiy A. V. 2010. Preparation of extractive substances from the shell of seeds of the Siberian pine in the electromagnetic field of the microwave. In:

- Sbornik tezisov dokladov IV Mezhdunarodnoy konferentsii «EOS-2010». Voronezh. P. 73. (In Russian)
12. Matasova S. A., Mitina N. A., Ryzhova G. L., Zhuganov D. O., Dichko K. A. 1999. Preparation of dry extract of the roots of *Inula helenium* and study its chemical composition. — *Khimiya rastitelnogo sirya*. 2: 119—123. (In Russian)
 13. Kaliev A. T., Butabaeva K. Zh., Turgumbaeva A. A., Yeskaliyeva B. K., Burasheva G. Sh., Hajiakber A. 2011. Supercritical fluid CO₂ extraction plants of the genus of *Climacoptera* and *Petrosimonia*. — *Vestnik KazNU im. Al-Farabi. Seriya khimicheskaya*. 1(61): 152—154. (In Russian)