

# *Is the principle of justice respected in the implementation of conventional beekeeping support?*

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**Abstract.** From 2023, conventional beekeepers will receive support for pollination of land areas. The amount depends on the land area and the number of hives. Hives must be registered and veterinary requirements must be met. In addition, the beekeeper must certify that the relevant landowner will allow the beekeeper's bees to pollinate the landowner's cultivated areas for five consecutive years. It sounds quite absurd. In addition, the amount of support in material terms is so small that the beekeeper must seriously consider whether the relevant areas will be available for five years before asking to allow the bees to pollinate the neighbor's crops. If not, the aid received will have to be repaid. In general, support measures for conventional beekeeping are currently implemented in such a way and to such an extent that it can be said that there is no support at all. Therefore, in order to preserve beekeeping as an industry, it is immediately necessary to: 1) radically change the procedure for granting support, 2) increase the amount of support to at least cover the costs of the pollination service provided to the farmer.

**Keywords:** *beekeeping, beekeeper, bees, conventional beekeeping, pollination.*

## I. INTRODUCTION

"Honeybee" is an animal belonging to the species *Apis mellifera*. [1] "Beekeeping is recognised to be an activity, which has an essential significance in the sustainable development of the rural areas, in the job-creation, the conservation of the ecosystem's biological diversity, and in the maintenance of ecological balance." [2] In addition to producing bee products for consumption, bees maintain biodiversity and provide food to society with pollination. The honey bee is a key managed species worldwide for both crop pollination and honey production [3] [4], a highly valued resource worldwide. [5] "84% of plant species and 76% of Europe's food production are directly

dependent on pollination. The estimated economic value of this process is 14.2 billion euros per year". [6] So, the activity of beekeepers is associated with a significant contribution to the economy in the form of produced products and the maintenance of the ecosystem as a whole. In order to evaluate the current situation in the beekeeping industry, surveys were conducted with organizations and beekeepers involved in the industry. As a result, 81% of the respondents recognized that beekeepers need support to ensure operations, mainly for updating the number of bees in hives, that measures are needed to prevent damage caused by adverse climatic conditions and to develop and promote the use of management practices suitable for changing climatic conditions. [7] Until 2023, support for conventional beekeepers was provided for the number of inhabited hives. The purpose of the study is to identify and analyze the main problems of conventional beekeeping from 2023, when the receipt of support is determined for the areas to be pollinated, based on the experience of beekeepers obtained by summarizing the conclusions of the first year of the implementation of this procedure.

## II. MATERIALS AND METHODS

Research methods are based on the analysis of data, documents, available information, beekeepers' experience and regulatory acts. The importance of honey bees as a globally important resource is assessed. The study uses an analytical method to investigate the current situation in the conventional beekeeping industry and specifically the possibility for a beekeeper to receive support based on pollination of areas, rather than support for bee colonies only. With the help of the comparative method, the proportion of conventional beekeepers in the total number of beekeepers has been updated, support for beekeepers in

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some European countries has been examined. The requirements set forth in the regulations for beekeepers and the problems of fulfilling the set requirements are summarized, based on the practical experience expressed by beekeepers about the experience accumulated in 2023. Using the analytical and comparative method, problems in the implementation of support measures were identified. It has been established that with the year 2023, completely new requirements for receiving support for conventional beekeepers have been introduced, which obliges beekeepers to request that grain farmers give written permission for the conventional beekeeper's bees to pollinate his fields, this is absurd. With the help of the analytical method, proposals have been put forward to change the conditions of the normative act, which determine the analyzed support conditions.

### III. RESULTS AND DISCUSSION

Society is interested in developing conventional beekeeping to ensure the efficiency of honey production and ensure the irreplaceable influence of bees on environmental conservation. The number of bee colonies is characterized by the information that on May 1, 2020, 102,019 bee colonies were registered in Latvia. In 2021, at the beginning of May - 87,465 bee colonies, which is 14.3% less than in the corresponding period a year earlier.[8]

All over the world, beekeepers report that bee colonies are dying, for example France, Belgium, Germany, Great Britain, Italy, Spain and the Netherlands, USA, Brazil.[9] In addition, the death of bee colonies to such an extent that announcements are made about the risk of extinction of pollinators.

Of course, slowly world trends in this area also affect Latvia. Various information can be found on the number of bee colonies, but conventional beekeepers must be recognized as producers who can influence the market for bee products, which must be distinguished in this respect from "hobby" beekeepers.

A beekeeper must first of all count on the purchase of bee colonies, the purchase of bee keeping equipment, hives, cells, inventory. As an unpredictable and uninfluenced able condition to be reckoned with, there is a very long wintering period of bees in the conditions of Latvia. Approximately from September to April, a total of seven to eight months, when the viability of bees can be negatively affected until they die: 1) drastic changes in weather conditions, 2) diseases, 3) problems with food (perhaps it is not usable, lack of food, etc.) and other circumstances. So, for example, a bee keeper with 40 years of experience says that "out of 240 winterized bee colonies this year, I have lost more than half"[10]. This vividly describes the special dependence of beekeeping on weather conditions, chemical agents used by other farmers, etc.

In order for a beekeeper engaged in conventional beekeeping to qualify for any state or European Union support, a whole series of requirements must be fulfilled, which consume time and require money. Below is an overview of the key conditions that qualify as tiered requirements. In addition, the excessive requirements are of course expressed in direct annual costs[11], which the beekeeper has to cover.

1. The owner or keeper of bee colonies, after the first registration in the state institution at the Agricultural Data Center, must submit information about the bee colonies (hives) according to the state on May 1 and November 1 of the respective year by the end of May and November every year, stating the registration number of the colony and hive, review date and number of bee colonies.[12] It is possible to submit information via electronic registration (after concluding a contract with the institution) or in paper form, for example by submitting an application to an employee of the relevant institution, who is available in a specific county on a specific day and time.[12]
2. If during the working season of bees, that is, in the period from April 1 to September 30, bee colonies are moved to the field to be pollinated outside the shelter to a temporary location for pollination of plants, the owner or keeper of the holdings, using the electronic notification system, must provide information about the performed relocation to the Agricultural Data Center within seven days after the said relocation. The Ministry of Agriculture has indicated that as of April 1, 2021, five regulations are applicable with regard to the traceability (registration and marking) of animals, including bee colonies: Regulation (EU) 2016/429 of the European Parliament and of the Council on transmissible animal diseases and which is amended and repealed by specific acts in the field of animal health ("Animal Health Act"); Komisijas deleģētā Regula 2019/2035 (ES) Commission Delegated Regulation 2019/2035 (EU) supplementing Regulation (EU) 2016/429 of the European Parliament and of the Council with regard to the rules applicable to facilities for keeping terrestrial animals and hatcheries, and regarding the traceability of certain terrestrial animals and hatching eggs; The Commission's Implementing Regulation (EU) 2021/520, which lays down rules on how to apply Regulation (EU) 2016/429 of the European Parliament and of the Council with regard to the traceability of certain kept terrestrial animals; Commission Implementing Regulation (EU) 2021/963, the framework provisions for the application of Regulation (EU) 2016/429 of the European Parliament and of the Council (EU) 2016/1012 and 2019/6 with regard to the identification and registration of horses and creates models of identification documents for these animals; Commission Implementing Regulation (EU) 2022/1345 laying down rules on the application of Regulation 2016/429 of the European Parliament and of the Council with regard to the registration and approval of facilities where terrestrial animals are kept and reproductive products are collected, obtained, processed or stored.

3. In the food circulation with bee products, it is allowed to engage (that is, sell) only if the activity is registered with the Food and Veterinary Service. Of course, it is necessary to ensure that the necessary hygiene requirements are met for honey processing rooms, used devices, and containers.[12]
4. Quality, classification and additional labeling requirements for honey must be observed.[13]
5. The beekeeper must keep records of treatment and prevention measures for bee colonies, samples taken for diagnosis and analyzes performed. Laboratory tests of drinking water should be performed regularly, that is, at least once a year.[14]
6. Beehive labeling requirements must be met.[12]

It can be concluded that the bureaucratic burden on the beekeeper has been ensured, because the goal of legal norms is not achieved in the best possible way to protect the values [15], which in the case of beekeeping are based on historical experience, life knowledge, and the existence of an industry based on rural development as a whole.

The main problems that conventional beekeepers face are as follows.

1. Bee products, first of all, the yield of honey depends on weather conditions. For example, a cold spring prevents bees from collecting honey in the spring season, the so-called "spring" honey. Prolonged rain can generally cause the death of bees.
2. Damage caused by forest animals to bee colonies. For example, the damage caused by bears, most often completely eliminating bee colonies.
3. Use of pesticides in the cultivation of agricultural plants, such as rape. The effect of various chemicals on bees is sometimes identified as a phenomenon when a beekeeper put down winters bee colonies for hibernation, but in the spring, when you open the hive after wintering, there are no bees in the hive and you cannot tell where they have disappeared.[16] It turns out that the bees' organism was weakened possible by the influence of chemicals and was not able to survive the winter months in the hive.
4. Bees exposed to substances harmful to bees are more susceptible to disease.
5. The spread of monocultures greatly limits the ability of bees to fight various threats against to bees, such as mites, other parasites.

So, bees and beekeeping as a whole are the industry most dependent on nature, the surrounding environment, weather conditions, chemicals, threats from other forest animals. Therefore, if the state recognizes that beekeeping as an industry is necessary, it should be given adequate

support that sufficiently minimizes the listed threats. In 2011, "hobby" beekeeping [17] dominated in Bulgaria and Europe, in 2021, when conducting a study on beekeeping activities in seven European countries (Estonia, Croatia, Finland, Italy, Norway, Portugal and Spain), two thirds of the surveyed beekeepers described themselves as conventional beekeepers [18], it confirms that beekeeping is perceived as an important agricultural sector.

As of 2023, beekeepers can no longer receive support for the number of bee colonies to be maintained, but the beekeeper is obliged to register the areas on which bees will provide pollination. At the same time, for example, in Sweden already in 2019, depending on the number of colonies, beekeepers received subsidies for pollination of cherry, apple and clover fields - 50-80 € per colony of bees.[19] So, from 2023, payment can be received for a hectare where the beekeeper's bees provide the pollination service.[20]

The main requirements for support payments for the "provision of pollination service" are as follows:

1. Multi-year commitments are made for five years. Beekeepers must undertake that the number of bee colonies declared in the support year, in the first year of the particular beekeeper will pollinate exactly the same area as in the first year for all the years.
2. The support applicant must have at least two beehives/colonies per hectare in order to receive support for one pollinated hectare.
3. No less than fifteen hectares, which the beekeeper to apply to pollinate, can be applied for support.
4. No less than thirty hives/flocks in the conventional farming system must be registered in the agricultural data center during the grazing season (May 15-September 15).
5. When moving beehives/flocks to pastures, the minimum distance from the beehive shelter is three kilometers.
6. During the grazing period, the support applicant must notify the Agricultural database (within 7 days after the relocation) of the temporary relocation of beehives, indicating the number of beehives, the start and end date and location of the relocation (cadastre number).
7. Hives must be marked with the herd number assigned by the Agricultural Data Center.[21]
8. Must take qualification courses in agriculture and food production in the amount of 40 hours by May 31, 2027.

Without analysis of requirements, the implementation of such a support system shows that in the season of 2023, the number of applicants for support funding in the event "Management of beekeeping units for pollination needs" decreased by 25%. [22] The question is justified, whether it is really necessary to create a new, comprehensive

regulatory act [23], when it is obvious that the authors do not understand the implementation of these provisions. "The notion of legal reason" [24] has disappeared when formulating the obligations that, starting from 2023, conventional beekeepers must fulfill.

This is not surprising, because with the launch of the new support system, conventional beekeepers have faced several problems that cannot be solved without losing human dignity:

1. Difficulties in obtaining approval from other land managers for land units that the beekeeper wants to apply for support. In practice, it was found that in 67% of cases, beekeepers could not find the manager of the land units and contact information to coordinate the land units that the beekeeper's bees "want" to pollinate and apply for support, in 58% of cases, the land managers indicated that they wanted to receive payment for coordination and consent pollination cases. In 69% of cases, other farmers did not want to give approval and consent to receive pollination services.[21]
2. In the event that the beekeeper needs to obtain information about the owners of agricultural lands adjacent to the apiary, this creates ethical problems. Taking into account the laws of logic [25], the conditions should be exactly the opposite. Farmland owners should ask the beekeeper to let his bees go to the field and pollinate, not the other way around. For example, you will not be able to get a crop from unpollinated canola.[26]
3. Obtaining contact information about land owners and users from the Cadastre information system is a paid service.[27]
4. Bees can fly only a certain distance, so "traveling apiaries" without an appropriate economic base cannot exist at all, because moving a beehive requires either additional workers, which the beekeeper cannot afford to hire, or technical equipment (special loaders, trailers), which purchase requires significant investment.

The mentioned conditions put the beekeeper in the role of a humiliating supplicant in relation to the owners of neighboring lands that grow rapeseed, other crops, because the beekeeper must beg: will you let my bees fly to pollinate your crops? Beekeepers do not have the appropriate equipment to be able to actually implement "travelling beekeeping", because one or two people cannot even lift a beehive with bees, let alone take the many where. It needs for klifts, trailers. Not to mention that in the summer season such work can only be done at night, because even with the slightest light the bees are outside the hive. Moreover, the amount of aid is so small that it does not cover even the basic costs. There is no doubt that the set conditions are overly bureaucratic and do not contribute to the development of beekeeping as an industry. If we want to preserve conventional beekeeping in Latvia, not just amateur beekeeping with one or two bee colonies, the support requirements must be changed

immediately and beekeepers must be given support that is sustainable in terms of economic, nature protection and social aspects.[28] Beekeepers must be given fair, proportionate support for the development of beekeeping.

The fact that conventional beekeeping can be preserved as an important agricultural sector is proven, for example, by the experience of France. France has allocated 5 million euros to support beekeepers in 2024. Beekeepers insist that the work is hampered by high costs, bureaucracy, increase in unsold production, unregulated foreign competition, production losses related to climate change. [29] African countries have a different view, where beekeeping is valued as an industry that can make a very large contribution to the family budget. [30]

The assessment of proportionality has disappeared, but before the implementation of the regulation the essential interests [31], [32] should be identified and weight or value should be assigned to these interests, it is obvious that this principle has been forgotten in the creation of the analyzed regulation. At the same time, justice "Like a hidden treasure" [33],[34], which derives from the basic norm that Latvia is a democratic republic, has disappeared from this regulation. Only the above-mentioned principles indicate that beekeepers must be given fair, proportionate support for the development of conventional beekeeping, therefore the regulations of the Cabinet of Ministers, where requirements for conventional beekeepers have been set since 2023, must be changed.

#### IV. CONCLUSIONS

In order to preserve beekeeping as an agricultural industry, there is an immediate need to:

1. It is necessary to radically change the procedure for granting support. The main stakeholder in field pollination is the field owner. A beekeeper does not have to plead with a neighboring landowner to allow the beekeeper's bees to pollinate his fields. Therefore, the number of bee colonies managed by the beekeeper should be the main criterion for granting support. Therefore, the regulations of the Cabinet of Ministers of April 18, 2023 No. 197 and 2.1.5. In point "Requirements for the implementation of the intervention "Management of beekeeping units for pollination", support for conventional beekeepers should be provided based on the number of bee colonies maintained by the beekeeper.
2. There is an immediate need to increase the amount of support so that it at least covers the costs of beekeepers. The amount of support at the moment is too small even for bee hibernation measures. The size of the aid should be analogous to the aid received by cereal growers. Therefore, the regulations of the Cabinet of Ministers of April 18, 2023 No. 197 and 2.1.5. the condition of the

requirement intervention "Management of beekeeping units for pollination" for conventional beekeepers, whose care is at least 30 bee colonies, the amount of support to be granted, giving the agricultural sector - beekeeping the opportunity to maintain this occupation.

The research uses an analytical method to investigate the requirements in the work of conventional beekeepers. With the help of the analytical and comparative method, problems have been identified when applying for state support since 2023. In order to study the problems of the practice of conventional beekeepers, the following methods of interpretation of legal norms were used: grammatical, systemic, teleological and historical. Inductive and deductive research methods were used to draw conclusions about existing requirements and conditions and suggest possible solutions.

#### REFERENCES

- [1] Komisijas Deleģētā regula (ES) 2019/2035 (2019. gada 28. jūnijs), ar ko attiecībā uz noteikumiem, kurus piemēro sauszemes dzīvnieku turēšanas objektiem un inkubatoriem, un attiecībā uz konkrētu sauszemes dzīvnieku un inkubējamu olu izsekojamību papildina Eiropas Parlamenta un Padomes Regulu (ES) 2016/429 2.panta 13)punkts. Available: <https://eur-lex.europa.eu/legal-content/LV/TXT/?uri=CELEX%3A32019R2035&qid=1679491910019> [Accessed March 15, 2024].
- [2] I.Krampuža, The Development Problems of Biological Beekeeping. Environment. Technology. Resources. Rezekne, Latvia Proceedings of the 13th International Scientific and Practical Conference. Volume I, 139.
- [3] A.Valido, M.-C. Rodríguez-Rodríguez & P.Jordano, Honeybees disrupt the structure and functionality of plant-pollinator networks, 2019. [Abstract]. Available: <https://doi.org/10.1038/s41598-019-41271-5> [www.nature.com/scientificreports/](http://www.nature.com/scientificreports/) [Accessed April 27, 2024].
- [4] J.Háva, Note: Recording of Some Beetles in Honey Bee Colonies, CERCETĀRI agronomice în Moldova, [Abstract]. Available: <https://agris.fao.org/search/en/records/65deb7d04c5aef494fdd9e2e> [Accessed April 25, 2024].
- [5] D.Van Engelsdorp, M.-D. Meixner, A historical review of managed honey bee populations in Europe and the United States and the factors that may affect them. [Abstract]. Available: <https://agris.fao.org/search/en/records/65de65f54c5aef494fdbdc24> . [Accessed April 24, 2024].
- [6] Bišu aizsardzība un cīņa pret viltota medus importu Eiropā. Available: <https://www.europarl.europa.eu/topics/lv/article/20180122STO92210/bisu-aizsardziba-un-cina-pret-viltota-medus-importu-eiropa>. [Accessed April 27, 2024].
- [7] Latvijas Kopējās lauksaimniecības politikas stratēģiskais plāns 2023.- 2027.gadam. Available: <https://www.zm.gov.lv/lv/media/11058/download?attachment> [Accessed March 15, 2024].
- [8] Sākotnējie dati, Latvijā par 14% sarucis reģistrēto bišu saimju skaits. Available: [https://www.delfi.lv/193/politics/53265831/sakotnējie-dati-latvija-par-14-sarucis-registroto-bisu-saimju-skaits#google\\_vignette](https://www.delfi.lv/193/politics/53265831/sakotnējie-dati-latvija-par-14-sarucis-registroto-bisu-saimju-skaits#google_vignette) [Accessed March 15, 2024].
- [9] Kāpēc samazinās bišu un citu apputeksnētāju skaits? (infografika). Available: <https://www.europarl.europa.eu/topics/lv/article/20191129STO67758/kapec-samazinās-bisu-un-citu-apputeksnetaju-skaits-infografika> [Accessed March 15, 2024].
- [10] Vides organizācijas aicina parakstīt petīciju bišu glābšanai. Available: <https://www.tvnet.lv/6981917/vides-organizācijas-aicina-parakstīt-petīciju-bisu-glābšanai> [Accessed March 15, 2024].
- [11] Informatīvais ziņojums "Par"nulles birokrātijas" pieejas ieviešanu tiesību aktu izstrādes procesā". Available: <https://tap.mk.gov.lv/lv/mk/tap/?pid=40476165&mode=mk&date=2019-08-20>. [Accessed April 28, 2024].
- [12] 2029.gada 26.marta Ministru kabineta noteikumi Nr.134. "Lauksaimniecības un akvakultūras dzīvnieku, to ganāmpulku un novietņu reģistrēšanas un lauksaimniecības dzīvnieku apzīmēšanas kārtība". Available: <https://likumi.lv/ta/id/305856-lauksaimniecibas-un-akvakulturas-dzivnieku-to-ganampulku-un-novietnu-registresanas-un-lauksaimniecibas-dzivnieku-apzimesanas> [Accessed March 15, 2024].
- [13] Kvalitātes, klasifikācijas un papildu marķējuma prasības medum. 2015.gada 26.maija Ministru kabineta noteikumi Nr.251. Available: <https://likumi.lv/ta/id/274304-kvalitates-klasifikācijas-un-papildu-markejuma-prasibas-medum>. [Accessed March 15, 2024].
- [14] Biškopības produktu primārās ražošanas vadlīnijas. Pārtikas veterinārais dienests. 2006. Available: <https://www.zm.gov.lv/lv/media/1446/download?attachment>. [Accessed March 15, 2024].
- [15] D.Rezevska, Ideology, values, legal norms and constitutional court, Collection of Research Papers in Conjunction with the 6th International Scientific Conference of the Faculty of Law of the University of Latvia Constitutional Values in Contemporary Legal Space II 16–17 November, 2016, pp.74.
- [16] Vides organizācijas aicina parakstīt petīciju bišu glābšanai. Available: <https://www.tvnet.lv/6981917/vides-organizācijas-aicina-parakstīt-petīciju-bisu-glābšanai>. [Accessed March 15, 2024].
- [17] P.Khrstov, Testing a method of safe keeping of small bee colonies, with scanty honey-combs. Available: <https://agris.fao.org/search/en/records/6472507353aa8c896305f716>. [Accessed April 28, 2024].
- [18] P.-F.-R.Guiné, S.Mesquita, J.Oliveira, C.Coelho, D.-T.Costa, P.Correia, H.-E.Correia Björn Dahle, M.Oddie, R.Raimets, R.Karise, L.Tourino, S.Basile, E.Buonomo, I.Stefanic, C.-A. Costa, Characterization of Beekeepers and Their Activities in Seven European Countries, Available: <https://www.mdpi.com/2073-4395/11/12/2398>. [Accessed April 25, 2024].
- [19] Latvijas biškopji apgūst vērtīgu pieredzi ārzemēs. Available: <https://www.laukutikls.lv/nozares/uznemejdarbiba/raksti/latvijas-biskopji-apgust-vertigu-pieredzi-arzemes>. [Accessed April 26, 2024].
- [20] Atbalsta piešķiršanas kārtība Eiropas Lauksaimniecības fonda lauku attīstībai platībatkarīgo un dzīvniekatkarīgo saistību īstenošanai. 2023.gada 18.aprīļa Ministru kabineta noteikumi Nr.197. Available: <https://www.vestnesis.lv/op/2023/77.6> [Accessed March 15, 2024].
- [21] Biškopības vienību apsaimniekošana apputeksnēšanas vajadzībām. Available: <http://new.llkc.lv/lv/nozares/ekonomika-lauku-attistiba/biskopibas-vienibu-apsaimniekosana-apputeksnesanas-vajadzibam>. [Accessed April 27, 2024].
- [22] Bišu saimju skaits Latvijā piecos gados pieaudzis par 13,4%. Available: <https://www.tvnet.lv/7822431/bisu-saimju-skaits-latvija-piecos-gados-pieaudzis-par-13-4> [Accessed March 15, 2024].
- [23] A.Smiltēna. Izpildvaras loma mūsdienu likumdošanas procesā, NO: Juridiskās zinātnes teorētiskie un praktiskie problēmjautājumi. Juridiskās zinātnes doktorantu un zinātniskā grāda pretendentu IIIzinātniski praktiskās konferences rakstu krājums, Rīga, LU Akadēmiskais apgāds, 2012,219.lpp (kopā 294.lpp.)

- [24] D.Rezevska, Deriving and concretization of the principle of good legislation: Legal Science: Functions, Significance and Future in Legal Systems II. The 7th International Scientific Conference of the Faculty of Law of the University of Latvia Oct. 16-18,2019.
- [25] I.Vedins, Loģika, Latvijas Policijas akadēmija, 1996., pp.10.
- [26] Ģenētiski modificēto (ĢM) kultūraugu iespējamā ietekme uz konvencionālo un bioloģisko lauksaimniecību Latvijā. LLU. LR ZM subsīdiju projekts Nr.270605/S220. 2005.Available: <https://www.lbtu.lv> [Accessed March 15, 2024].
- [27] I. Neusa Luca, Gada mazais uzņēmējs nodarbojas ar bitēm. Available: <https://zz.lv/gada-mazais-uznemejs-nodarbojas-ar-bitem/> [Accessed March 15, 2024].
- [28] Sustainable agriculture in the EU. Available: [https://agriculture.ec.europa.eu/sustainability\\_en](https://agriculture.ec.europa.eu/sustainability_en) [Accessed March 15, 2024].
- [29] France offers aid to its struggling beekeepers amid farmer protests.Available: <https://www.reuters.com/world/europe/france-offers-aid-its-struggling-beekeepers-amid-farmer-protests-2024-02-23/>. [Accessed April 26, 2024].
- [30] V.Hakizimana, Beekeeping improves rural incomes. Bees for Development Journal 142, June 2022, pp.8.
- [31] P.Craig., G.De Búrca, EU law: Text, cases, and materials. 5th edition. New York: Oxford University Press, 2011, pp. 526.
- [32] Dž.Gaile, Samērīguma principa izpratne un piemērošana publiskajā iepirkumā iesniegta piedāvājuma izvērtēšanā, pp.452.: Tiesības un tiesiskā vide mainīgos apstākļos. Latvijas Universitātes 79.starptautiskās zinātniskās konferences rakstu krājums. Rīga: LU akadēmiskais apgāds, 2021.
- [33] D.Rezevska Vispārējo tiesību principu nozīme un piemērošana. 2. atk. un papild. izd. Rīga: D. Rezevska izd., 2015, pp.42.-46.
- [34] V. Sinaiskis, Likumu iztulkošana vispār un civilo sevišķi: Tieslietu Ministrijas Vēstnesis, Nr. 7/8, 1929, pp.253.-254.