



Beekeeping in Bulgaria 2021

The number of bee colonies on October the 1, 2021 is 838.0 thousand, which is 2.9% less than 2020, in spite of the fact that the number of bee colonies in 2021 decrease to 665.0 thousand (-2.2%), the honey production is 11 638 tons or 28.4% more than 2020. The average production from one bee colony increased to 31.6% and amounted to 17.5 kg.

During the year of observation 3.4 tons of propolis and over 34 tons of bee pollen have been produced.

The number of holdings breeding bee colonies in 2021 decreased to 10 801 (-7.1%). Holdings with 1 to 49 bee colonies decreased by 9.3%. Holdings with 50 and more bee colonies decreased with 5.0%. The average number of bee colonies in one holding increased by 4.4% to 77.6 bees/holding.

81 thousand bee colonies died in 2021 in total.

For the 2021, 5 667 tons of honey have been sold to processors, 1 952 tons have been sold directly, 277 tons – to retailers, 209 tons – to the industry, and 1 540 tons –for own consumption.

Table 1

Beekeeping holdings, bee colonies and honey production by statistical regions in 2021						
Statistical zones (NUTS 1) and statistical regions (NUTS 2)	Beekeeping holdings	Bee colonies	Bee colonies, used for the production of honey	Average number of bee colonies	Honey production	Average honey production per a bee colony
	01.10.2021	01.10.2021				
	(number)	(number)	(number)	(number)	(tons)	(kg)
Bulgaria	10 801	837 955	665 020	77.6	11 638	17.5
<i>Severna i Yugoiztochna Bulgaria</i>	<i>8 147</i>	<i>701 869</i>	<i>564 338</i>	<i>86.2</i>	<i>10 446</i>	<i>18.5</i>
Severozapaden	1 825	142 806	115 720	78.2	2 087	18.0
Severen tsentralen	2 223	192 068	161 016	86.4	3 137	19.5
Severoiztochen	2 109	188 499	155 358	89.4	3 107	20.0
Yugoiztochen	1 990	178 496	132 244	89.7	2 115	16.0
<i>Yugozapadna i Yuzhna tsentralna Bulgaria</i>	<i>2 654</i>	<i>136 086</i>	<i>100 682</i>	<i>51.3</i>	<i>1 192</i>	<i>11.8</i>
Yugozapaden	877	41 274	34 005	47.1	402	11.8
Yuzhen tsentralen	1 777	94 812	66 677	53.4	790	11.8

Source: Ministry of Agriculture, Agrostatics Department, Survey Beekeeping in Bulgaria

Table 2

Destroyed bee colonies and losses caused by various factors in 2021 by statistical regions						
Statistical zones (NUTS 1) and statistical regions (NUTS 2)	Destroyed Bee colonies	of which				Change 2021/2020
		By poisoning	By diseases	By hunger	Other reasons	
	(number)	(number)	(number)	(number)	(number)	(%)
Bulgaria	81 440	17 031	8 443	12 500	43 466	84.0%
<i>Severna i Yugoiztochna Bulgaria</i>	<i>68 132</i>	<i>14 435</i>	<i>6 011</i>	<i>10 318</i>	<i>37 368</i>	<i>117.7%</i>
Severozapaden	6 644	1 908	694	433	3 609	3.7%
Severen tsentralen	15 575	3 358	1 480	2 942	7 795	127.9%
Severoiztochen	22 940	4 414	2 547	5 675	10 304	260.2%
Yugoiztochen	22 973	4 755	1 290	1 268	15 660	99.4%
<i>Yugozapadna i Yuzhna tsentralna Bulgaria</i>	<i>13 108</i>	<i>2 596</i>	<i>2 432</i>	<i>2 182</i>	<i>6 098</i>	<i>3.6%</i>
Yugozapaden	3 440	264	720	626	2 030	8.0%
Yuzhen tsentralen	9 668	2 332	1 712	1 556	4 068	2.0%

Source: Ministry of Agriculture, Agrostatics Department, Survey Beekeeping in Bulgaria

Results and analyses

Beekeeping holdings by statistical regions in 2020 and 2021

Statistical zones (NUTS 1) and statistical regions (NUTS 2)	Beekeeping colonies at 01.10.2020	Beekeeping colonies at 01.10.2021	Change 2021/2020	Bee colonies, used for the production of honey in 2020	Bee colonies, used for the production of honey in 2021	Change 2021/2020
	(number)	(number)	(%)	(number)	(number)	%
Bulgaria	863 283	837 955	-2.9%	680 266	665 020	-2.2%
Severna i Yugoiztochna Bulgaria	726 313	701 869	-3.4%	578 547	564 338	-2.5%
Severozapaden	154 901	142 806	-7.8%	128 185	115 720	-9.7%
Severen tsentralen	205 461	192 068	-6.5%	161 008	161 016	0.0%
Severoiztochen	184 658	188 499	2.1%	149 181	155 358	4.1%
Yugoiztochen	181 293	178 496	-1.5%	140 173	132 244	-5.7%
Yugozapadna i Yuzhna tsentralna Bulgaria	136 970	136 086	-0.6%	101 719	100 682	-1.0%
Yugozapaden	43 248	41 274	-4.6%	30 813	34 005	10.4%
Yuzhen tsentralen	93 722	94 812	1.2%	70 906	66 677	-6.0%

Source: Ministry of Agriculture (MoA), Agrostistics Department, Survey Beekeeping in Bulgaria

Figure 1. Bee colonies (number)

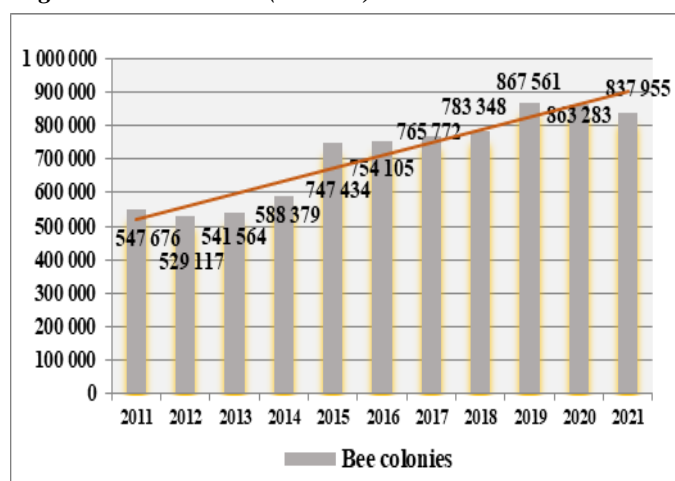
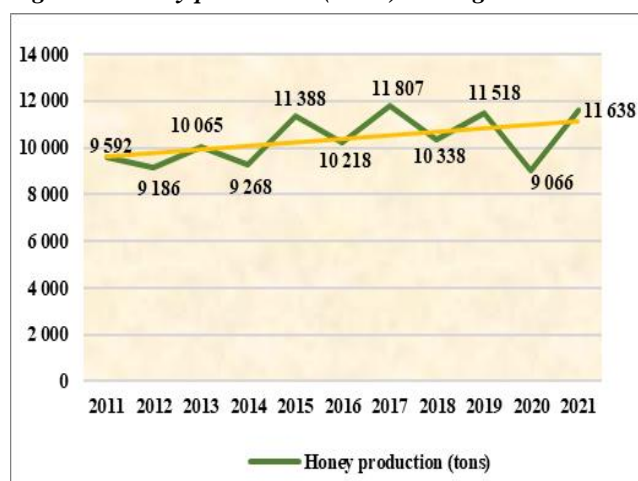


Figure 2. Honey production (tones) in Bulgaria



Source: Ministry of Agriculture (MoA), Agrostistics Department, Survey Beekeeping in Bulgaria

Table 4

Number of bee colonies in a holding	Holdings by number of bee colonies								
	Holdings at 1 st October			Bee colonies at 1 st October			Average number of bee colonies		
	2020	2021	Change 2021/2020	2020	2021	Change 2021/2020	2020	2021	Change 2021/2020
	(number)	(number)	(%)	(number)	(number)	(%)	(number)	(number)	(%)
1 to 9	1 968	1 188	-39.6%	10 678	5 942	-44.4%	5.4	5.0	-7.4%
10 to 49	3 689	3 945	6.9%	91 884	92 751	0.9%	24.9	23.5	-5.6%
50 to 149	4 273	3 819	-10.6%	384 015	347 585	-9.5%	89.9	91.0	1.2%
150 and more	1 696	1 849	9.0%	376 706	391 677	4.0%	222.1	211.8	-4.6%
Total	11 626	10 801	-7.1%	863 283	837 955	-2.9%	74.3	77.6	4.4%

Source: Ministry of Agriculture, Agrostistics Department, Survey Beekeeping in Bulgaria

Table 5

Distribution of honey and average selling prices (ASP)					
Market distribution	Amount of bee honey sold in 2020	Average price* in 2020	Amount of bee honey sold in 2021	Average price* in 2021	Change of the average price 2021/2020
	(tons)	(BGN/kg)	(tons)	(BGN/kg)	(%)
Direct sales	1 800	7.76	1 952	8.19	5.5%
Direct sales to retailers	448	5.93	277	8.45	42.5%
Sales to processors	4 894	4.27	5 667	5.67	32.8%
Sales to the industry	634	4.06	209	5.53	36.2%
Total sales	7 776	5.15	8 105	6.37	23.7%
For own consumption and bee feeding	1 399	-	1 540	-	-

*VAT excl.

Source: Ministry of Agriculture, Agrostatics Department, Survey Beekeeping in Bulgaria

Figure 3. Bee colonies holdings (number)

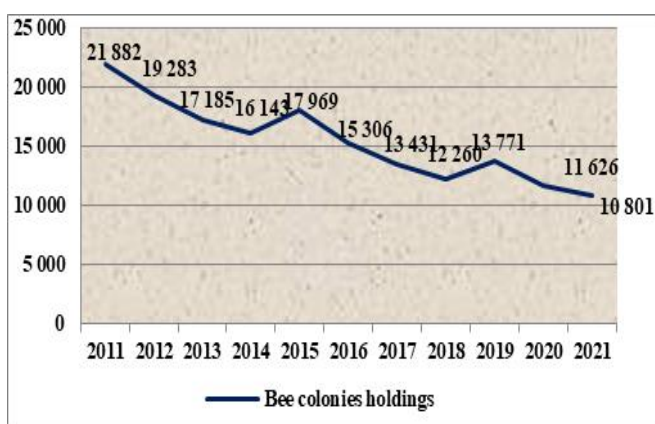
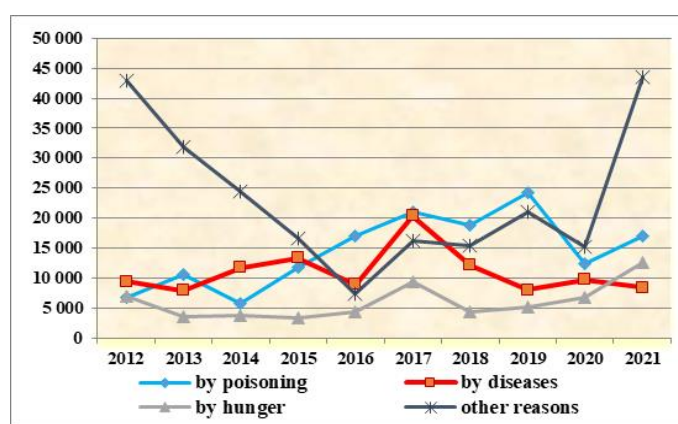


Figure 4. Destroyed bee colonies (number)



Source: Ministry of Agriculture, Agrostatics Department, Survey Beekeeping in Bulgaria

Table 6

Preventive measures and bee colonies feeding in 2020 and 2021						
Measures	2020		2021		Change 2021/2020	
	Bee colonies	Average costs for one bee colony	Bee colonies	Average costs for one bee colony	Bee colonies	Average costs for one bee colony
	(number)	(BGN)	(number)	(BGN)	(%)	(%)
Treatment against varroaosis	842 234	5.00	832 386	5.46	-1.2%	9.2%
Autumn feeding	595 510	7.12	576 988	7.41	-3.1%	4.1%
Winter feeding	546 940	6.98	519 106	7.04	-5.1%	0.9%
Spring feeding	623 817	7.10	582 396	7.38	-6.6%	3.9%
Other costs	596 567	10.60	633 096	12.52	6.1%	18.1%

Source: Ministry of Agriculture, Agrostatics Department, Survey Beekeeping in Bulgaria

Table 7

Storage of honey and storage value (including transport and storage costs)					
Type of storage container	Storage value			Relative share of holdings using storage containers by type	
	2020	2021	Change 2021/2020	2020	2021
	(ЛВ./КГ)	(ЛВ./КГ)	(%)	(%)	(%)
In tins	0.33	0.34	3.0%	67.0%	69.6%
Glass jars	0.60	0.59	-1.7%	44.1%	42.4%
In plastic packaging	0.64	0.70	9.4%	2.1%	2.4%
Other packaging	0.22	0.54	145.5%	1.0%	1.2%

Source: Ministry of Agriculture, Agrostatics Department, Survey Beekeeping in Bulgaria

Table 8

Mobile beekeeping				
Characteristics	(units)	2020	2021	Change 2021/2020 (%)
Bee colonies, involved in mobile beekeeping	(number)	22 415	28 518	27.2%
Holdings, practicing mobile beekeeping	(number)	260	294	13.1%
Value of transport costs and veterinary certificates	(BGN/bee colony)	9.50	11.14	17.3%

Source: Ministry of Agriculture, Agrostatics Department, Survey Beekeeping in Bulgaria

In 2021, 23 holdings with 2 644 bee colonies indicated that they had 27 agreements (written or verbal) with farmers for crop pollination.

Methodological notes

The survey purpose is to determine the number of bee colonies on 1st October 2021, the honey production in 2021, the sale and average prices (VAT excl.) of the sold honey, the main costs of the production and storage of bee honey, the number of destroyed bee colonies in 2021 and the reasons for their destruction. The survey data is used for analyses and programs for the sector, as well as to make management decisions in the implementation of agrarian policy in beekeeping. The legal basis for the statistical survey is the National Statistical Program for 2022. The results of the conducted survey are in accordance with the requirements of Commission Implementing Regulation (EU) 2022/1475 for determining detailed rules for the implementation of Commission implementing Regulation (EU) 2015/1368 laying down rules for the application of Regulation (EU) 1308/2013 of the European Parliament and of the Council with regard to aid in the apiculture sector Regulation (EU) 1308/2013 of the European Parliament and of the Council establishing a common organisation of the markets in agricultural products and repealing. The used definitions in the survey are those specified in the cited regulations.

Surveyed Statistical indicators:

1. Holdings raising bee colonies, bee honey production and sale - number of holdings with bee colonies; number of bee colonies; honey production- tons; average honey production - kg from 1 bee colony; sold honey - tons; prices of sold honey - BGN per kilogram.
2. Distribution of honey production - direct sales, sales to retailers, to processors, to the industry, own consumption by the farmer's household.
3. Indicators for the prevention, production and other costs, related to the bee colonies - value of preventive treatments against varroaosis, costs of bee feeding, number of destroyed bee colonies, mobile beekeeping and honey storage.

The questionnaire consists of 22 questions and covers administrative information about the holding, legal status, registration number of the apiary according to Ordinance No. 10 of April 1, 2015 on the conditions for registration and the procedure for identification of bee colonies, number of bee colonies, quantity and sale of honey production, production costs and costs related to the storage of honey.

Scope, model and volume of the sample - the sample (stratified and random) is prepared using a list of holdings breeding bee colonies from the Census of agricultural holdings in Bulgaria in 2020 and new holdings created after 2020, information about which is obtained from the farmers' register under Ordinance No. 3/1999. 2 587 holdings breeding bee colonies are surveyed. The organization and control of the survey is carried out by the Agrostatics Department at the Ministry of Agriculture and Food.

Confidentiality – the national confidentiality rules are defined in the Statistics Act. According to Art. 25 individual statistical data as well as statistical information that summarizes data for less than three statistical units or for an aggregate in which the relative share of the value of a studied parameter of one unit is over 85 percent of the total value of this parameter for all units of the population cannot be disclosed or provided.

Accessibility and transparency - the data on the number of bee colonies, destroyed bee colonies during the year, on the amount of bee honey production and the honey sales are available to users on the website of the Ministry of Agriculture and Food: <http://www.mzh.government.bg/bg/statistika-i-analizi/izsledvane-zhivotnovdstvo/danni/>, in accordance with the deadline established in the National Statistical Program and in the Calendar for the dissemination of the results of the statistical surveys conducted by the Ministry of Agriculture and Food.

Distribution of administrative districts by statistical regions (NUTS 2) – Severozapaden: Vidin, Vratsa, Montana, Lovech, Pleven; **Severen tsentralen:** Veliko Tarnovo, Gabrovo, Ruse, Silistra, Razgrad; **Severoiztochen:** Varna, Dobrich, Targovishte, Shoumen; **Yugoiztochen:** Burgas, Sliven, Stara Zagora, Yambol; **Yugozapaden:** Blagoevgrad, Kyustendil, Pernik, Sofia-cap., Sofia region; **Yuzhen tsentralen:** Kardzhali, Pazardzhik, Plovdiv, Smolyan, Haskovo.

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Contacts: Ministry of Agriculture, Agrostatics Department
E-mail: agrostat@mzh.government.bg

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