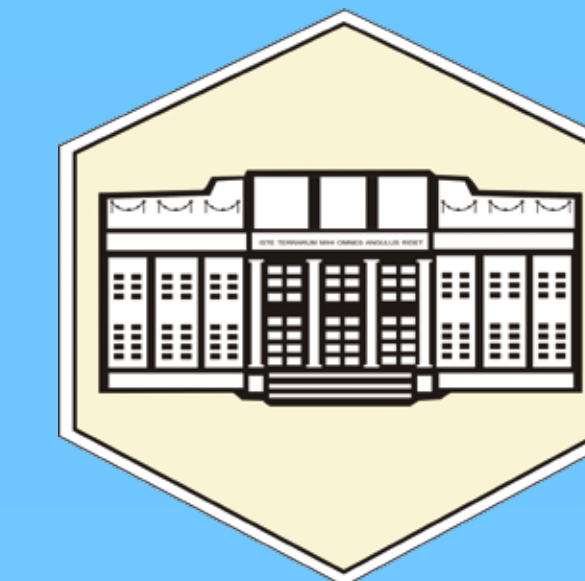


ECONOMIC CONDITIONS FOR BEEKEEPING DEVELOPMENT IN POLAND



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Beekeeping is a very important sector of Polish agriculture. The value of honey and other bee products market is estimated ca. 150 million EUR. Whereas benefits for agriculture resulting from bee pollination of only rape fields and orchards is estimated for over 1 billion EUR. Not without a reason, condition of other sectors of agriculture is believed to be dependent on the condition of the beekeeping sector. Therefore, the aim of this study was to evaluate current condition of the apiculture in Poland and to indicate its development conditions. The research was conducted in 2012. Data from the following sources were used: the register of the General Veterinary Inspectorate, the Ministry of Agriculture and Rural Development, Agricultural Market Agency, information from the surveys directed at the Polish beekeeping organizations, and own studies and analyses.

In 2012, 1 280 thousand bee colonies were kept in Poland. The average density of honeybee colonies was irregular and region-dependent (from 1.6 to 7.5 colonies/1 km²). The average for Poland was 4.1 colonies/1 km², while the average for rape fields and orchards was only 1.1/1 km². During 2012, 51.7 thousand of beekeepers were registered. About 33 thousand ran apiaries comprising of up to 20 colonies. There was 307 (0.59% of beekeepers) professional beekeepers (having over 150 colonies) owning almost 82 thousand colonies (6.4% of the total number). The average apiary size was 24.7 colonies. In 2012 beekeepers produced ca. 17.2 thousand tons of honey. However, like other EU countries, Poland imports high amounts of honey. A year-to-year increase of honey import, and export, is observed. Over 6 thousand tons of honey were exported, while ca. 14.2 thousand tons were imported. The highest amounts of Polish honey were sold on the EU markets with Germany as the main consumer. The highest amounts were imported from China and Ukraine. The costs of production (in 2012 ca. 80 EUR per one bee colony) play a decisive part in the economics of the Polish beekeeping sector. The costs of production have risen (due to higher prices of hives, foundation, sugar, fuel and electric energy) by a dozen or so percent in last years. Until recently losses of bee colonies in Poland occurred mainly during the wintering and were noted at first, early spring inspections. Those losses did not exceed a few percent and were included in the costs of apiaries' maintenance. Last years (since 2006) the phenomenon of mass colony losses has escalated, reaching a dozen or so percent of the total number of colonies every year. The average loss for Poland after the wintering (recorded in spring 2012) amounted to 13% of colonies.

Table 2. Professional beekeeping in Poland

Voivodship	Number of professional apiaries	Number of bee colonies in professional apiaries	Average number of bee colonies in professional apiaries
Warmińsko - mazurskie	61	18551	304,1
Dolnośląskie	36	8628	239,7
Lubelskie	35	8945	255,6
Podkarpackie	24	5279	220,0
Pomorskie	23	7290	317,0
Wielkopolskie	23	5677	246,8
Małopolskie	21	6978	332,3
Mazowieckie	18	4115	228,6
Zachodniopomorskie	12	2700	225,0
Kujawsko - Pomorskie	11	2435	221,4
Łódzkie	10	1897	189,7
Świętokrzyskie	9	2250	250,0
Lubuskie	7	3260	465,7
Śląskie	7	1410	201,4
Podlaskie	6	1310	218,3
Opolskie	4	1240	310,0
Total or average	307	81965	267,0

Table 3. Average honey prices (PLN/kg) at different distribution channels*

Honey variety	Direct sales			Intermediary purchasing points			Retail sales		
	from	to	average	from	to	average	from	to	average
Multifloral	14.0	30.0	21.8	8.0	12.0	9.5	19.0	30.0	24.2
Rape	14.0	28.0	20.5	8.0	11.0	9.0	20.0	32.5	23.5
Acacia	19.2	30.0	25.2	10.0	18.0	16.0	20.0	40.0	31.2
Lime	19.2	38.0	26.3	10.0	17.0	15.0	20.0	40.0	30.0
Buckwheat	20.0	35.0	27.1	10.0	16.0	15.0	20.8	42.5	31.8
Coniferous honeydew	25.0	50.0	36.7	15.0	30.0	22.0	27.0	57.5	39.7
Deciduous honeydew	22.0	40.0	29.2	14.0	16.0	15.0	26.0	30.0	28.0
Heather	30.0	50.0	39.0	25.0	31.0	29.0	50.0	64.8	56.8

*1 EUR ~ 4 PLN

Table 1. Polish beekeeping – the basic data

Voivodship	Number of bee colonies	Number of beekeepers	Density of bee colonies / km ²
Lubelskie	163580	5538	6.51
Warmińsko - mazurskie	123819	2802	5.12
Podkarpackie	122749	4972	6.88
Małopolskie	113604	5860	7.48
Wielkopolskie	102002	4213	3.42
Dolnośląskie	96923	3505	4.86
Mazowieckie	94457	4285	2.66
Zachodniopomorskie	68505	2244	2.99
Śląskie	64204	4897	5.21
Kujawsko - Pomorskie	63312	2430	3.52
Świętokrzyskie	55567	2037	4.74
Pomorskie	50474	1746	2.76
Łódzkie	49521	2578	2.72
Lubuskie	46285	1721	3.31
Opolskie	33057	1648	3.51
Podlaskie	32634	1302	1.62
Total or average	1280693	51778	4.1

Table 4. The average losses of bee colonies in Poland after the wintering of 2011/2012

Voivodship	Losses of bee colonies in Poland after the wintering (recorded in spring 2012) (%)	
	from - to	average
Dolnośląskie	5 - 32.5	13.1
Kujawsko - Pomorskie	9 - 20	14.3
Lubelskie	10 - 25	17.7
Lubuskie	12 - 20	16.0
Łódzkie	10 - 15	11.4
Małopolskie	8 - 27.5	18.7
Mazowieckie	8 - 20	13.8
Opolskie	20	20.0
Podkarpackie	3 - 35	11.1
Podlaskie	2	2.0
Pomorskie	5	5.0
Śląskie	6	6.0
Świętokrzyskie	5 - 35	18.6
Warmińsko - mazurskie	4 - 10	5.5
Wielkopolskie	8 - 17.5	12.1
Zachodniopomorskie	7 - 20	11.9
Total	2 - 35.5	13.0

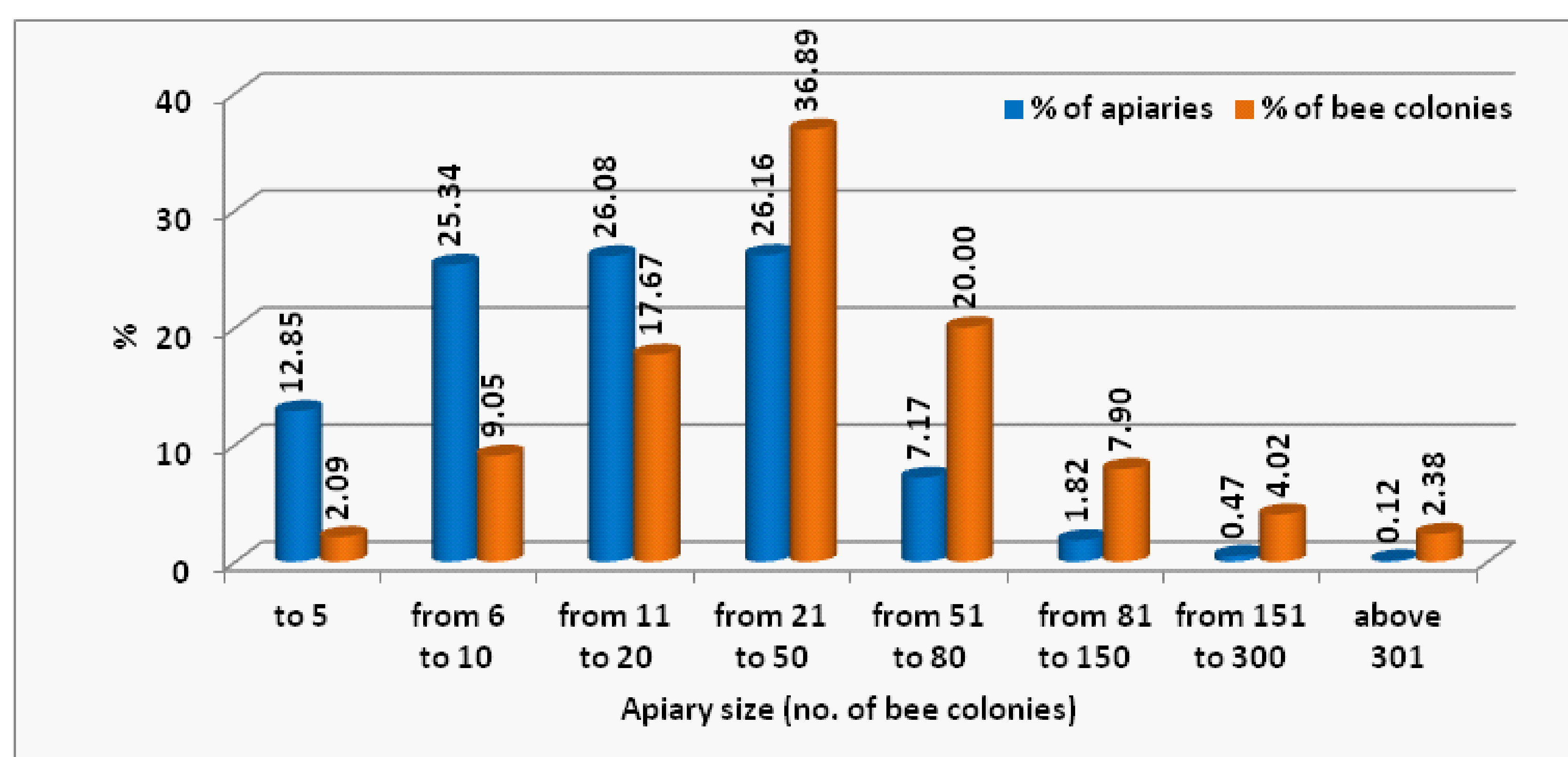


Fig. 1. The size structure of Polish apiaries.

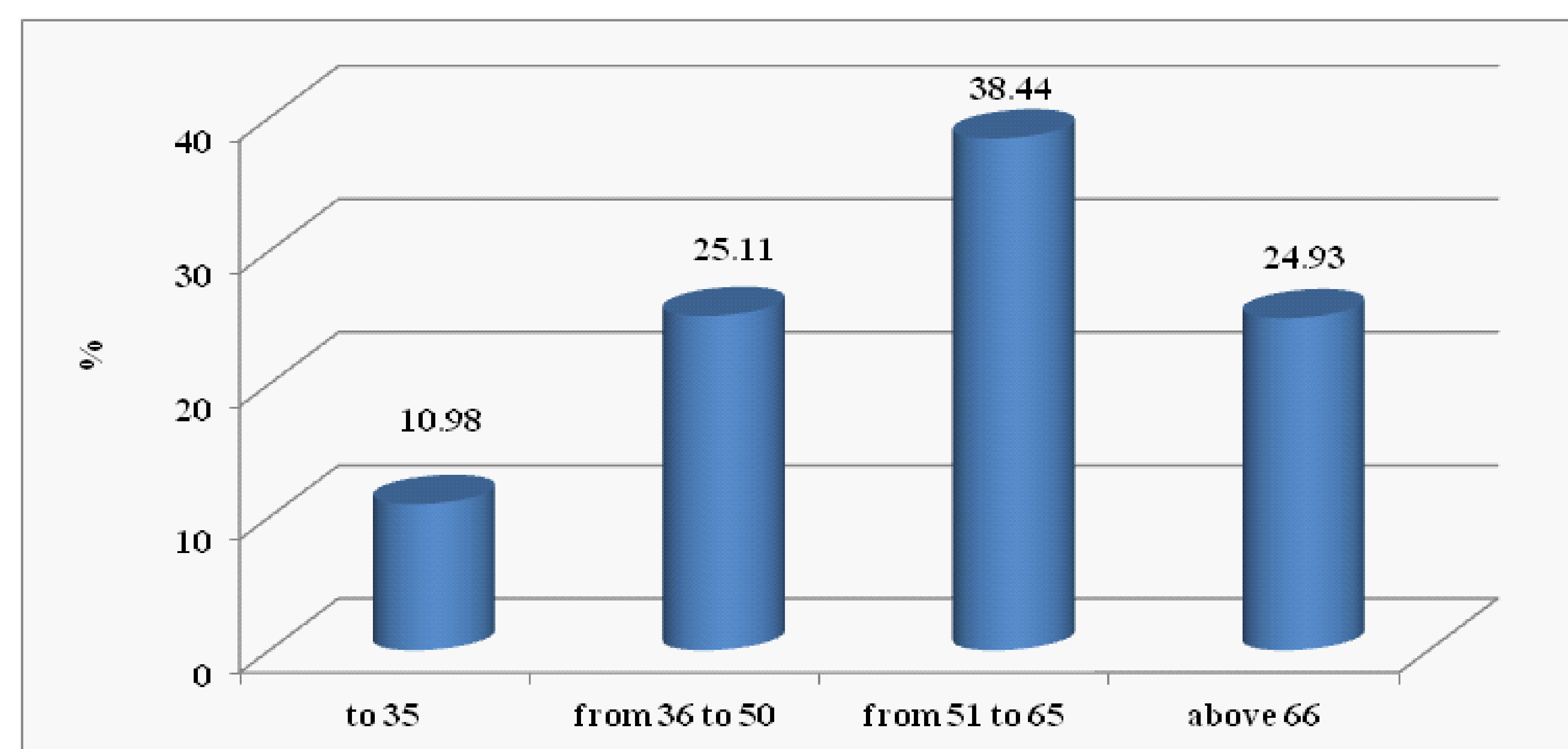


Fig. 2. Age of Polish beekeepers.