## **Real Precious Stones of the Royal Crown of Time**

Alvina – bee; cera – wax; favus – comb; mellus – honey; pastus – virgin wax. Thus, starting from the main found of words we can notice that beekeeping and products related to beekeeping (except the fact that they were appreciated and they had a second place after bread in this country) had a well marked continuous route, and Dacia's colonization by the Romans became one of the millenary proofs in this sense.

Fossilized honeycombs discovered in several rivers of Ardeal and taken to the museum of Turda, the small boards covered by wax discovered in a abandoned mine of Roşia Montană of Apuseni and used for writing by the Romans, the information supplied by the works of certain antiquity historians like Herodot or Xenofon, are other important proofs of the existence of a prosper beekeeping in our country.

But, like in other domains, beekeeping increased or decreased according to the historical period it encountered. People's migration, laws which differed until the Unification of the Romanian Countries, taxes which generated lack of material means and others led to late development of beekeeping, of its transformation in a modern primitive beekeeping.

But in 1794 Ioan Tomici of Caransebeş set up the first Romanian beekeeping school. In 1823 he also prints a book: "Beekeeping or Learning about taking care of hive". His recommendations are still of the hour: "... the most pleasant and useful food for the bees is pure honey collected by them...". Then the queen substance, scientifically confirmed some decades ago, had a clear determination for Ioan Tomici: "Bees love the smell of the queen and it seems that when it does not exist they cannot survive. This smell is so powerful that, if it does not exist in the hive or in the swarm, bees become nervous and start to desperately search for their queen. The smell helps them be know that the queen is in the swarm. ...." The same author, when talking about communication between bees, says in the quoted book: "As a result of the examination of the signals and behavior of bees, we can draw the conclusion that they have a communication system: if a bee discovers a honey source, it returns to the hive to announce its sisters about this discovery and then it goes out of the hive together with many bees and go to the nourishment source".

In fact, Ioan Piuariu-Molnar, ophthalmologist and Transilvanian scientist was the first to publish, in 1785, the first Romanian book about beekeeping (typed with Cyrillic letters), entitled Hives economy. In that work he talks about using wood hive which have warehouses and separating bars like a beekeeper of Sadu, close to Sibiu used to do. Then there followed other contributions to the improvement of the modern hive: N. Grand (1837-1893), G. Hermes (1874), R. Begnescu (1898), Al. Atanasiu-Albina (1916), G. Hanganu (1930), V. Harnaj and N. Romanescu (1948), until the standard hive used at present in Romania.

The presence of the technical Romanian thinking in the field of systematic hive modernization is confirmed (F. Begnescu, 1925) by the fact that the hive improved by N. Grand was officially recommended during its period under the name of Berlepsch-Grand; by the fact that the horizontal hive of G. Hermes, very criticized (R. Begnescu, 1898) can be considered the ancestor of the horizontal Romanian hive STAS 4170-50, that the vertical hive with two bodies of R. Begnescu (presented in 1898) is the grandfather of the Romanian vertical hive with three bodies STAS 8128-68, and the prototype improved with the help of professor dr. eng. Harnaj and of dr. N. Romanescu is the vertical hive R.A. 1001, produced and sold in the whole country in thousand of exemplars. And V. Schelejan, the famous beekeeper and promoter of beekeeping with its origins in Banat, presented at the Congress

of Beekeepers of Germany and Austria which took place at Salzburg (Austria) in 1872, the separating bar for the queen, made of metal, conceived and used by them. He did not patent his invention but he warmly recommended it to its contemporaries in order for them to obtain better quality honey.

Following the traces of the beekeeping technique, in a course published in 1902, Ulrich reminds the usage of rudimentary centrifuge used by the beekeepers of the western part of the country. At the end of the 19<sup>th</sup> century a centrifugal honey extractor was also used by some innovative beekeepers of Brăila county.

Starting with the 15<sup>th</sup> century, Romanian presses for wax extraction were very much appreciated too. In Caianu Mic, Bistriţa-Năsăud county and Sebeş, Sibiu county, Drăgăşani and Stiduna, Olt county, Ursoaica of Vâlcea, Colanu of Dâmboviţa, Cacica of Suceava, Tansa of Vaslui, beekeepers who loved progress but who were still anonymous made the peasant presses for wax extraction out of the honeycombs. These presses are somehow unique in the world, keeping at the same time their efficiency: in this manner 95% of the wax is extracted, for instance, from the ancient honeycombs.

We can say that the activity, knowledge and practice in the Romanian beekeeping field always used the contributions of ancestors which in time became a real knowledge thesaurus.

The first attempts of a professional reorganization of the beekeepers of Romania took place around 1860 in all counties: Banat, Transilvania, Bucovina, Țara Românească and especially Moldavia. But the first proof of thet kind comes from Banat in 1872. The passion for bees determined a lot of beekeepers associate within the commune around a more experimented beekeeper. Learning one from another, they contributed to the progress of that domain.

The local, regional or national nature of these organizations is considered less important than their aims: the development and the modernization of beekeeping based on enthusiasm, passion and professional solidarity.

A very important moment for the Romanian as well as for the international beekeeping was the Second World War, when major losses were registered. From a statistic point of view, there were 472,312 bee families in 1948, out of which 33% were housed in primitive hives. Resuming the beekeeping activity within a mass organization had become a necessity at that time, under new political and economic circumstances. Thus, the Association of Romanian Beekeepers was set up on December 30, 1957. In time, the Association acquired its own material and technical base and an organization potential which allowed it to contribute efficiently to the development of all beekeeping branches. In about 20 years of operation, the Association had reached a number of over 60,000 members, with a constant growth, grouped in over 1200 beekeeping groups, of villages and cities, united in 33 subsidiaries. The number of bee families also grew to over 1,050,000 hives in January 1979, out of which 18% belonged to public farms, the forestry department and collective households and 82% to amateur beekeepers. The whole technical and information necessaries were supplied by the Association's Agricultural Combine, through its 160 centers. Not only did the legislation provide granting credits to beekeepers so that they could enlarge their apiaries and make new ones, but it also mentioned that incomes from beekeeping were tax-exempted. Other facilities referred to the purchase of beekeeping products directly from the apiary, free exploit of Romania's honey-related resources, shepherding facilities, payment of pollination services, free technical and sanitary-veterinary assistance. These favorable circumstances for beekeeping, performed almost entirely in a

modern environment, have reached an output from 3.5-4 kg to 16 kg/colony. All means of professional growth were then used through trainings for beginners and advanced beekeepers, improvement and specialty trainings, post-university trainings and conferences, exchanges, documentation visits, beekeeping expositions, a monthly periodic *Romanian Beekeeping*, a great number of books, leaflets, flashcards, documentaries about this domain etc.

The Beekeeping Combine, one of its kind due to its design, dimensions, output capacity and product diversity, covers an area of 10 hectares, with 14 modern pavilions, with production departments, workshops and laboratories. Three specialized beekeeping institutions operate in a perfect coordination, within this beekeeping platform in Băneasa-Bucharest. From the Beekeeping Combine the whole necessary equipment leaves for beekeepers along Romania: artificial honeycombs, bio-stimulators, medicines etc). Over 500 sorts of beekeeping products are manufactured here.

The Institute of Beekeeping Researches is located on the same platform, and it deals with the selection and improvement of local biologic material, the creation of lines and the production of hybrids of great productivity of the Carpathian bee, the improvement of the honey flora, controlled pollination of entomophily cultures with the help of bees, efficient exploitation of bee families of the apiaries of amateur beekeepers as well as industrial apiaries, the production of new types of equipment, the improvement of certain drugs for control of bee diseases, apitherapy and the usage of bee products for protecting human health, like for instance revitalizing and therapeutic products. The Institute has experimental bases, pilot stations and other stations for the production of selected biological material. The future beekeeping personnel is trained on the same platform, in the Liceul Apicol (Beekeeping Highschool) which has full-time or mail courses.

In 1958, the Romanian Association of Beekeepers became member of the International Federation of Beekeeper Associations – APIMONDIA, which in 1965 organized in Bucharest, the 20<sup>th</sup> jubilee international Congress of beekeeping. As a result of the trust of the Romanian government in the power and capacity of the Romanian association, the Romanian government approved, at the request of the International Federation of Beekeeper Associations, the authorization of the set up of the International Institute of Beekeeping Technology and Economy and of the APIMONDIA publishing house in Romania, which, among other things, issues APIACTA magazine, as well as a rich beekeeping literature in several languages. We will bring recent data regarding the development of this sector.

That is the breathtaking manner of writing the history of the Romanian beekeeping during the last two centuries. That is thanks to the devotion and abnegation for bees of thousands of beekeepers of Romania, to the cooperation with the beekeeping organizations of all the countries of the world.

MARTA GIOGIA