



The Importance of Honey Production (Forest Honey, Honeydew) in the Forest and Agroforest

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ABSTRACT

Non-timber forest products can be defined as all tangible animal and plant products other than industrial timber, which can be collected from forests for subsistence and for trade. The NTFPs play significant role, especially for the rural poor by providing products for food, medicines, construction materials, utensils, etc. Honeydew honey is an important honey type. It is known that it has especially high antioxidant and also antibacterial activity. World-wide and from a commercial point of view it is a relatively minor honey type. However, in many European countries like Germany, Switzerland, Austria, Slovenia, Greece, Turkey and others, honeydew honey is harvested in relatively high amounts, achieving very good prices.

Non-timber forest products can be defined as all tangible animal and plant products other than industrial timber (Ros-Tonen, 1995; Angelsen and Wunder, 2013) The NTFPs play significant role, especially for the rural poor by providing products for food, medicines, construction materials, utensils, etc. Honey is the unfermented, natural sweet substance produced by honeybees from the nectar of blossoms or from secretions of living parts of plants or excretions of plant sucking insects on the living parts of plants, which honeybees collect, transform and combine with specific substances of their own, store and leave in the honeycomb to ripen and mature (FAO, 1963). Turkey is one of the biggest honey producers of the World (Table 1,2). In fact, Turkey produces 92 percent of the world's pine honey, specifically in its West Mediterranean and South Aegean regions.

Table 2. Honey Production in Turkey

Year	Honey Production (tonnes)	
	World Total	Turkey
2013	1.663.798	94.694
2012	1.592.701	88.162
2011	1.573.028	94.245
2010	1.542.216	81.115
2009	1.510.323	82.003
2008	1.520.956	81.364



Some countries have specific honeydew denominations such as "fir" or "oak", based of sensory, microscopic and chemical analysis. Honeydew honey is produced from excretions of plant-sucking insects on the living part of plants. For example pine honey is mainly prepared from honeydew secreted by the insect *Marchalina hellenica* (Gennadius), which is restricted to *Pinus brutia* Ten. and *Pinus halepensis* Mill. Labeling as forest honey and honeydew from a commercial standpoint is an important issue. Furthermore, in general meaning, honey has multiple marketing opportunities, unlike many other commodities. If an export market collapses, people still have some chance to sell or use the honey within towns There is especially a growing market for certified organic honey and fair trade honey, for which a higher price is paid (CBI, 2009). An estimate of the total market for organic honey in Europe is around 6,500 tons per year; 2% of the total honey market and at the same time, the price of honey has also increased for the past 25 years globally (Loon and Koekoek, 2006). and villages at home, or create secondary products.

Table 1. Honey Production by Geographic Grouping

Year	Honey Production (tonnes)				
	Africa	Americas	Asia	Europea	Oceania
2013	169.306	332.310	760.797	372.123	29.263
2012	164.239	320.807	737.482	348.413	21.760
2011	154.261	331.361	729.877	337.211	20.318
2010	167.211	319.428	682.414	348.603	29.261
2009	153.810	298.832	673.729	337.211	30.074
2008	158.414	315.177	664.391	348.413	31.165



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