

THE TURKISH PLANT COLLECTION OF HOF RAT PROF. CARL HAUSSKNECHT (1838-1903)

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A botanist interested in southeastern Anatolian plants, when referring to *Flora of Turkey* (1965-2000), sees frequently the name of Haussknecht among the collectors. Carl Haussknecht (1838-1903) was a German pharmacist whose passion for plants and for plant collecting made of him a highly distinguished professor of botany, possessing a rich herbarium and a rich library. In his youth, more than a century ago, he came to Anatolia, travelled in the provinces of Gaziantep, Maraş, Elazığ, Urfa, Mardin and adjacent regions, prepared a plant collection which includes many type specimens, and contributed thus to the knowledge of Turkey's native flora.

Two well documented articles inform us about the life and the scientific activities of C. Haussknecht. One is a eulogy by Hergt (1903), the second is the commemorative speech given on the occasion of his birthday centenary (Marbach 1939). With reference to these two speeches and by consulting other sources, we prepared a brief review of his scientific life and Turkish collections.

Carl Haussknecht is born on 30 October 1838 in Bennungen (Merseburg, Germany) as a child of a wealthy family. In 1855, he completed his pharmaceutical training required before attending the higher studies in pharmacy. He received his certificate of assistant-pharmacist and began to work in pharmacies, first in Germany, later in Switzerland. Always passionate for plants, he made acquaintance with Swiss botanists. In Geneva, E. Boissier (1810-1885) who was working on his *Flora Orientalis* (1867-1888) suggested him to visit the eastern Mediterranean countries, and to collect for him plant material. Before going to the East, Haussknecht went to Breslau and completed his studies. In May 1864, he gave the state examination and received his diploma of pharmacy.

His devotion to botany surpassed his profession. In autumn 1864, aged 26, he started his first travel to the East Mediterranean. He visited Syria, Mesopotamia and mainly the Upper Euphrates in S.E. Anatolia. He returned to

Geneva in spring 1866, he put his collection in order, and gave it to Boissier. In the autumn of the same year, he undertook his second expedition to the East. He went to Iran via Mesopotamia and travelled in the West of this country. He stayed at Tehran for a while, then he went to Caucasia. He has been much appreciated in Persia by the Shah who decorated him with a medal. He returned to Weimar in 1869. He arranged his collection and sent it to Boissier. As a reward of his successful activities, the Grand Duke of Saxony accorded him the title of Professor. Between 1873 and 1876, he was at the head of his own pharmacy. Then he gave up and concentrated his works on systematic botany. He founded in 1883 the "Thüringische Botanische Verein". He made a third voyage to the East in summer 1885. This time he visited Greece and travelled with Th. von Heldreich (1822-1902) who was the director of the Botanical Garden in Athens (Baytop & Tan 2007). He published the results of his expedition in a series of 7 articles, under the title "Symbolae ad floram graecam. Aufzählung der in Sommer 1885 in Griechenland gesammelten Pflanzen" between 1893 and 1900 in *Mitteilungen des Thüringischen Botanischen Vereins*, the journal of the society he has founded (Strid 2006).

Through collecting, purchasing, exchanging, receiving as gift, Haussknecht developed a rich herbarium and a rich library. To accommodate them, he erected at Weimar a private building and opened his collections to the visit of researchers in 1896: *Herbarium Haussknecht*. He appointed J. Bornmüller (1862-1948) as curator, who occupied his position until 1938. The Grand Duke of Saxony, in his first visit to the Herbarium, conferred to Haussknecht the title of Hofrat. Later on, in 1949, the Herbarium and the Library were incorporated to the University of Jena (Wagenitz 1982).

In the last years of his life, Haussknecht suffered from asthma. He died at Weimar on 7 July 1903. He was married and had a daughter, born 1877.

Turkish collections

To know about the Turkish collections of Haussknecht, we first consulted the 9 volumes of *Flora of Turkey* (1965-1985) and its two supplements (1988-2000), where we hoped to find his specimens precisely cited with localities, collection numbers and dates. First we saw that the number of Haussknecht's Turkish specimens cited in the *Flora* is ca. 550, and that 146 of them are type specimens (syntypes and lectotypes included), representing 135 new taxa. Are inscribed furthermore in the *Flora*, 52 non Anatolian types that Haussknecht has collected from Greece, Syria, Iraq and Iran. Then we noticed that most of the specimens (types included) were unnumbered and/or undated, so that we did not have the opportunity to trace any itinerary and to detect the approximate number of specimens present in his collections. But, we learned that he came twice to

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Anatolia, in 1865 and 1867; that his specimens are from the provinces of Hatay, Gaziantep, Maraş, Adıyaman, Malatya, Elazığ, Diyarbakır, Urfa and Mardin; that also he visited Pamukkale (Denizli) in 1867 (vol.2:478) and Istanbul in an unknown date (vol.6:174; vol.7:367).

Another reference to Haussknecht's Anatolian travels is the communication of [H.] Kiepert in which he partly reproduced two letters of Haussknecht related to the voyage he started on October 1866 (Kiepert 1868). Both letters were dated 1867. The first was sent to [H.] Kiepert (1818-1898), geographer and cartographer in Berlin, the second to [H.R.] Göppert (1800-1884), botanist and paleontologist in Breslau. From this publication (Kiepert 1868), we learn that Haussknecht visited in S.Anatolia the following regions: from Halep he came to Gaziantep, collected there and on Suf dağı (7 hours N.E.of Gaziantep), went to Birecik, Sarug (Suruç), Harran and Urfa, explored the regions of Maraş, Zeytin (presently Süleymanlı), Berit dağı, Yarpuz, Elbistan, Besne, Adıyaman, Malatya, Akdağ, Harput, Diyarbakır and returned to Halep. In his letter of 28 August 1867, he noted the districts he visited as Kilis, Gaziantep, Gavur dağı, Maraş, Urfa, Viranşehir, Terek (actual Derik), Koçhisar, Mardin and Habur. From Habur he went to Süleymaniye (N.Iraq) from where he continued to Iran. The letter of 12 December 1867 addressed to Göppert deals only with Iran. No plants or any botanical observations are mentioned by Haussknecht in these letters. His interest is mainly geographical; he speaks about villages, lands, rivers, valleys, mountains, ruins, etc.

The 5 volumes of Boissier's *Flora Orientalis* (1867-1884) and its supplement (1888) are the main source where most of Haussknecht's Anatolian specimens are cited. Boissier met the young Haussknecht in Geneva, suggested him to herborize in the E.Mediterranean and provided him a subvention. He examined the specimens that Haussknecht brought to him and published them in his *Flora Orientalis*. We counted there ca. 1300 Turkish specimens of Haussknecht. This number ought to be somewhat higher, as many localities were not precise enough to decide if they were within the present borders of Turkey, Syria or Iraq. In any case, it will not be wrong to say that Haussknecht's Anatolian collections comprise ca. 2000 specimens.

Haussknecht has named many taxa, whether collected first by himself or by someone else. Few of the Anatolian types are described by him, but most are published jointly either with Boissier or with Bornmüller, or a third part simply by other botanists.

According to *Flora of Turkey*, 34 new Turkish taxa bear in their names, as specific or infraspecific epithet, the name of Haussknecht in genitive case: *haussknechtii*. Half of them are named by Boissier.

Boissier named in 1872 a new genus after him, *Haussknechtia* Boiss. (Umbelliferae), basing on a specimen collected by Haussknecht in S.W.Iran: *H. elymaitica* Boiss. The genus is monotypic and endemic to Iran.

Haussknecht, when describing alone a new taxon, preferred to publish it either in *Mittheilungen des Thüringischen Botanischen Verein* or in *Beihefte zum Botanischen Centralblatt* or in *Österreichische Botanische Zeitschrift*. When he was a co-author to Bornmüller, the taxa were described in *Mitt.Thür.Bot.Ver.* or in *Feddes Repertorium*. On the other hand, Boissier described in his *Flora Orientalis* the taxa he named jointly with Haussknecht.

The botanical publications of Haussknecht have been already presented in 3 different lists (Strid 2006, Demiriz 1993, Hergt 1903). Although he has published the results of his botanical expedition to Greece in a series of articles (Strid 2006), he has not made a similar publication regarding his Anatolian explorations.

According to Lanjouw et Stafleu (1957) and to *Flora of Turkey*, the Anatolian specimens of Haussknecht are distributed to 12 herbaria in 6 European countries: B, JE (Germany), W (Austria), CN, LY, P (France), BM, E, K (England), G, Z (Switzerland), LE (Russia).

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Hofrat Prof.Carl Haussknecht'in (1838-1903) Türkiye bitkileri koleksiyonu

Hofrat Prof.C.Haussknecht (1838-1903), Almanya'nın tanınmış botanistlerindendir. Çok zengin bir herbaryum ve kütüphane oluşturmuş, koleksiyonlarını ve kitaplarını barındırmak ve araştırmacıların yararlanmasına sunmak için, Weimar'da bir müstakil bina inşa etmiştir: *Herbarium Haussknecht* (1896). Haussknecht bir eczacıdır. Eczane işletmiştir, fakat bitkilere olan merakı onu bir toplayıcı ve bir botanist yapmıştır. Gençliğinde iki kez, 1865 ve 1867'de Anadolu'ya gelmiş ve Hatay, Gaziantep, Maraş, Adıyaman, Malatya, Elazığ, Diyarbakır, Urfa, Mardin illerinde gezmiştir. *Flora of Turkey*'e 550 kadar örneği girmiştir. Bu esere göre, bu illerden 135 yeni taksonun tipörneğini toplamıştır. *Flora Orientalis*'te 1300 kadar Anadolu örneği yer almıştır. Bu durumda, Haussknecht'in Anadolu'dan yaklaşık 2000 örnek toplamış olduğunu düşünebiliriz. Türkiye florasında 34 takson adı *haussknechtii* epitetini taşımaktadır. Boissier 1872'de, Umbelliferae familyasından bir cinse onun adını vermiştir: *Haussknechtia* Boiss. Haussknecht'in Anadolu örnekleri, 6 Avrupa ülkesinde 12 herbaryuma dağılmıştır.

The botanical expeditions and collections of Hofrat Prof. Carl Haussknecht (1838-1903) in Anatolia

Hofrat Prof. C.Haussknecht (1838-1903) was a well known German botanist. He founded a rich herbarium and a library, which he housed in Weimar in a separate building as the *Herbarium Haussknecht*, and opened it to the visit of researchers in 1896. He was a pharmacist and had a drugstore, but his passion for the plants made him a collector and a botanist. In his youth, he came twice to Anatolia, in 1865 and 1867. He travelled in the provinces of Hatay, Gaziantep, Maraş, Adıyaman, Malatya, Elazığ, Diyarbakır, Urfa, and Mardin. The *Flora of Turkey* cites nearly 550 of his specimens. We see there

that he has collected the types of 135 Anatolian new taxa. The number of Haussknecht's Anatolian specimens in *Flora Orientalis* is ca.1300. We can conclude then that his Turkish collection comprises not less than 2000 specimens. 34 Turkish taxa bears his name with the epithet *haussknechtii*. Boissier named in 1872 a new genus after him: *Haussknechtia* Boiss. His Anatolian specimens are distributed to 12 herbaria across 6 European countries.

Key words: Turkish flora, botanical collections, collectors, Carl Haussknecht, history of botany; **Anahtar kelimeler:** Türkiye florası, bitki toplamaları, toplayıcılar, Carl Haussknecht, botanik tarihi.