Literature on archaeological remains of cultivated plants (1826–1964)

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Abstract Data on literature about archaeological remains of cultivated plants had been systematically compiled and reported in a series of articles reaching from 1965 to 2000. Here we report about literature which appeared from 1826 (first publications found on this topic) to 1964. The complete citations of these publications (1026 items) can be found in an electronic appendix.

Keywords Archaeobotany · Cultivated plants · Palaeoethnobotany · Review of literature

Introduction

The study of archaeological remains of cultivated plants can contribute to a better understanding of their origin and evolution.

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But the respective publications are very widely dispersed in botanical and archaeological journals or the results are hidden parts in greater archaeological reports and therefore difficult to detect.

For the time between 1965 and 2000 the literature was already collected (1968 and following years, Kroll 1995 and following years, see below).

Up till now there are the following printed lists of publications on archaeological remains of cultivated plants:

Schultze-Motel J (1968) Literatur über archäologische Kulturpflanzenreste (1965–1967). Kulturpflanze 16: 215–230.
(1971) ditto (1968). Jschr mitteldt Vorgesch 55: 55–63.
(1972) ditto (1969). Kulturpflanze 19: 265–282.
(1972) ditto (1970/1971). Kulturpflanze 20: 191–207.
(1973) ditto (1971/1972). Kulturpflanze 21: 61–76.
(1974) ditto (1972/1973). Kulturpflanze 22: 61–76.
(1975) ditto (1973/1974). Kulturpflanze 23: 189–205.
(1976) ditto (1974/1975). Kulturpflanze 24: 159–178.
(1977) ditto (1975/1976). Kulturpflanze 25: 71–88.
(1978) ditto (1976/1977). Kulturpflanze 26: 349–362.
(1979) ditto (1977/1978). Kulturpflanze 27: 229–245.
(1980) ditto (1978/1979). Kulturpflanze 28: 361–378.
(1981) ditto (1979/1980). Kulturpflanze 29: 447–463.
(1982) ditto (1980/1981). Kulturpflanze 30: 255–272.
(1983) ditto (1981/1982). Kulturpflanze 31: 281–297.
(1984) ditto (1982/1983). Kulturpflanze 32: 229–243.
(1985) ditto (1983/1984). Kulturpflanze 33: 287–305.
(1986) ditto (1984/1985). Kulturpflanze 34: 317–333.

(1987) ditto (1985/1986). *Kulturpflanze* 35: 401–420.
 (1988) ditto (1986/1987). *Kulturpflanze* 36: 549–569.
 (1989) ditto (1987/1988). *Kulturpflanze* 37: 427–451.
 (1990) ditto (1988/1989). *Kulturpflanze* 38: 387–416.
 (1992) Literature on archaeological remains of cultivated plants (1989/1990). *Veget.*
Hist Archaeobot 1: 53–62.
 (1993) ditto (1990/1991). *Veget Hist Archaeobot* 2: 47–59.
 (1994) ditto (1991/1992). *Veget Hist Archaeobot* 3: 33–61.
 Kroll H (1995) Literature on archaeological remains of cultivated plants (1992/1993).
Veget Hist Archaeobot 4: 51–66.
 (1996) ditto (1994/95). *Veget Hist Archaeobot* 5: 169–200.
 (1997) ditto (1995/1996). *Veget Hist Archaeobot* 6: 25–67.
 (1998) ditto (1996/1997). *Veget Hist Archaeobot* 7: 23–56.
 (1999) ditto (1997/1998). *Veget Hist Archaeobot* 8: 129–163.
 (2000) ditto (1998/1999). *Veget Hist Archaeobot* 9: 31–68.
 (2001) ditto (1999/2000). *Veget Hist Archaeobot* 10: 33–60.

The literature reviews have been extensively cited in present archaeobotanical work (e.g. Zohary et al. 2012).

Results and discussion

Before this time span there are likewise many publications on this topic which have been collected here (1026 items), including also some publications dealing with origin of cultivated plants.

As far as we know, the first publications in this field are those of Kunth (1826), who investigated archaeological wheat remains from Egypt.

The first outstanding publication is the work of Heer (1865) with the title „Die Pflanzen der Pfahlbauten (The plants of the lake-dwellings)”. Commonly this paper is considered as the beginning of this subdiscipline of botany, later on called palaeoethnobotany, phyto-archaeology, archaeoethnobotany or archaeobotany.

In 1895 Buschan summarized the material from the Old World.

Most of the publications in our compilation deal with material from Europe.

A rough overview on countries and authors is given now.

Europe.

Austria.

Hofmann, Ladenbauer-Orel, Mühlhofer, Netolitzky, Stapf, Werneck.

Bosnia.

Bauer, Beck von Mannagetta, Hopf, Maly, Schröter.

Bulgaria.

Arnaudov.

Czechoslovakia.

Fietz, Kühn, Pavelčík, Tempír.

Denmark.

Hatt, Helbaek, Jessen, Schiemann.

England.

Helbaek, Jessen et Helbaek, Morrison.

France.

Combier, Coquillat, Gattefossé.

Germany.

Bertsch, Hopf, Schiemann, Rothmaler, Schulz, Werth and many others.

Greece.

Evans, Hopf, Netolitzky, Vickery.

Hungary.

Deininger, Sági et Füzes, Staub, Tempír, Zsák.

Italy.

Avetta, Battaglia, D'Amato-Avanzi, Di Vita, Helbaek, Landi, Oliva, Sordelli, Tongiorgi, Villaret-von Rochow, Wittmack.

Poland.

Burchardówna, Gizbert, Klichowska, Kozłowska, Lechnicki, Moldenhawer, Szafer, Wasylkowa, Zabłocki et Żurowski.

Portugal.

Netolitzky, Paço, Pinto da Silva.

Romania.

Pax et Hoffmann.

Russia.

Bachteev, Fljaksberger, Jakubciner, Negrul.

Sweden.

Hjelmqvist, Schiemann, Helbaek.

Switzerland.

Neuweiler, Rytz, Uhlmann.

Spain.

Hopf, Netolitzky, Tellez et Ciferri.

Africa.
 Egypt.
 ca. 20 authors investigated material from here,
 e.g. Åberg, Helbaek, Fljaksberger,
 Netolitzky, Schiemann, Schulz, Schweinfurth,
 Täckholm, Thaer, Unger, Wittmack, Woenig.
 Ethiopia.
 Ciferri.
 North America.
 Anderson, Cutler, Galinat et Gunnerson, Griffin, Heiser, Kaplan.
 Central America.
 Guatemala.
 Vestal.
 Mexico.
 Dressler, Brooke et al., Barghoorn et al., Kelley, Lasserre, MacNeish et Nelken, Mangelsdorf et Lister, Whitaker et al.
 South America.
 Argentina.
 Hunziker, Lagiglia.
 Chile.
 Wittmack.
 Peru.
 13 authors, e.g. Friedberg, Harms, Towle,
 Wittmack.
 Asia.
 Turkey.
 Gökgöl, Helbaek, Lindau, Schiemann,
 Wittmack.
 Cyprus.
 Helbaek.
 Palestine.
 Feinbrun, Goor, Negbi, Zaitschek.
 Caucasia and Transcaucasia.
 Arutiunian, Gummel, Lavrov, Menabde,
 Tumanjan.
 Iraq.
 Field, Frimmel, MacKay, Percival, Sinskaja.
 Afghanistan.
 Chowdhury.
 Azerbaijan.
 Ismajlov.
 India.
 Agrawal, Chaudhury, Chowdhury, Ghosh,
 Gode, Goiran, Kumar, Vishnu-Mittre.
 China.
 Chang, Din In, Edman et Söderberg, Kitamura,
 Nai, Ting Ying, Vasilyev.

Japan.
 Hamada.

Conclusions

The geographical extent of the investigations was expanded especially by Helbaek who described much material from the Near East.

Helbaek created in 1955 the term *paletnobotanique* (Une science née de la découverte des palafittes). Palaeoethnobotany may be defined as investigating the relationships between man and (cultivated) plants in former times.

Recent increases in archaeobotanical evidence (Fuller et al. 2014) produce steadily rising numbers of publications, so that their traditional compilation had to be given up in 2001.

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Compliance with ethical standards

Conflict of interest The authors declare no conflict of interest.

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