

Appendix 1. An overview of the studied floras from the Bohemian Massif and Saxony including summarized references with floristic, dating, and palaeoenvironmental results.

Studied floras	GPS	Floristic references	Dating			Paleoenvironmental methods	References
			Series	Stage	My / zones		
Nordhausen	N 51° 29´ 51.47", E 10° 47´ 50.59"	Mai & Walther (1988)	early Pleistocene	Praetiglian	1.65	IPR, CA	–
Nová Ves Mb. (Vildštejn Formation) – upper part	N 50° 9´ 19.74", E 12° 22´ 43.99"	Bůžek <i>et al.</i> (1985), Stuchlik (1982)			1.5–2.6	CA*, IPR*	Bůžek <i>et al.</i> (1985), *Teodoridis <i>et al.</i> (in press)
Rippersroda (Perrier-Rippersroda FA)	N 50°46´ 14.94", E 50°38´ 29.13"	Mai & Walther (1988)				IPR, CA	–
Nová Ves Mb. (Vildštejn Formation) – lignite beds	N 50° 9´ 19.74", E 12° 22´ 43.99"	Bůžek <i>et al.</i> (1985), Stuchlik (1982)	late Pliocene	Piacenzian (Reuverian)	2.5	CA*, LMA, IPR*	Bůžek <i>et al.</i> (1985), *Teodoridis <i>et al.</i> (in press)
Berga	N 51° 27´ 21.355", E 11° 0´ 30.913"	Mai & Walther (1988)				IPR, LMA, CLAMP, CA	–
Kranichfeld	N 50° 51´ 25.596", E 11° 12´ 11.499"					IPR, CA	
Gerstungen	N 50° 57´ 49.799", E 10° 4´ 5.099"				IPR, CA		
Nová Ves Mb. (Vildštejn Formation) – Nero Clay	N 50° 9´ 19.74", E 12° 22´ 43.99"	Bůžek <i>et al.</i> (1985), Stuchlik (1982)			?2.6–4.5	CA*, LMA, IPR*	Bůžek <i>et al.</i> (1985), *Teodoridis <i>et al.</i> (in press)
Vonšov Mb. (Vildštejn Formation) – Pluto Clay	N 50° 9´ 19.74", E 12° 22´ 43.99"					CA*, LMA, IPR*	Bůžek <i>et al.</i> (1985), *Teodoridis <i>et al.</i> (in press)
Kaltensundheim (Ceyssac FA)	N 50° 36´ 21.643", E 10° 9´ 22.740"	Mai & Walther (1988)	early Pliocene	Zanclean/Piacenzian	3.4	IPR, CA	–
Tachov Graben	N 49° 45´ 1.18", E 12° 46´ 53.52"	Bůžek <i>et al.</i> (1985)		Zanclean (Brunnsunian)	2.6–4.5	CA*, LMA, IPR*	Bůžek <i>et al.</i> (1985), *Teodoridis <i>et al.</i> (in press)
Moravská Nová Ves	N 48° 45´ 5.17", E 16° 52´ 1.47"	Knobloch (1969)	late Miocene	Tortonian (Pannonian)	7.2–11.6	CA, LMA, CLAMP, IPR	–
Klettwitz 12 (Schipkau FA)	N 51° 30´ 59.933", E 13° 53´ 56.476"	Mai (2000, 2001a, b)	middle Miocene	Tortonian	9.0–11.0	CA*, IPR	*Mosbrugger <i>et al.</i> (2005)
Horní Břiza	N 49° 50´ 28.79", E 13° 21´ 28.56"	Mai (2000, 2001a, b)	middle Miocene	Serrevalian (Late Badenian / Early Sarmatian)	11.6–13.8	CA, IPR	–
Klettwitz 3 (Klettwitz FA)	N 51° 32´ 34.508", E 13° 53´ 31.293"	Mai (2000, 2001a, b)	early Miocene/middle Miocene	Burdigalian/Langhian	13.6–14.7	CA*, IPR	*Utescher <i>et al.</i> (2009)
Berzdorf 2, Kleinleipisch (Kleinleipisch FA)	N 51° 31´ 1.20", E 13° 45´ 0.00"	Czaja (2003)			13.6–14.8	CA*, IPR	*Mosbrugger <i>et al.</i> (2005)
Wackersdorf	N 49° 18´ 50.96", E 12° 10´ 39.46"	Gregor (1978, 1990), Günther & Gregor (1993), Knobloch & Kvaček (1976)	early Miocene	Burdigalian (Karpatian)	14.5–17.3	CA*, LMA, CLAMP, IPR	Uhl (personal comments 2009)
Mydlovary Formation	N 49° 5´ 29.46", E 14° 21´ 12.43"	Knobloch (1986), Knobloch & Kvaček (1996)	early Miocene	Burdigalian (Karpatian)	15–17 (MN 5)	CA, LMA, CLAMP, IPR	–
Wiesa, Berzdorf 1 (Wiesa FA)	N 51° 15´ 0.00", E 14° 6´ 0.00"	Czaja (2003), Jechorek (pers. comm.)	early Miocene	Burdigalian (Karpatian)	16.5–16.7	CA*, LMA, IPR	*Grein <i>et al.</i> (2013)
Hrádek/N. (Kristina Mine)	N 50° 51´ 34.18", E 14° 49´ 27.50"	Holý (1974, 1977a, b, 1978), Kvaček & Teodoridis (in press)	early Miocene	Burdigalian (Karpatian)	16.5–16.7	CA*, LMA*, CLAMP*, IPR*	*Holý <i>et al.</i> (2012)
Horní Litvinov–Mariánské Radčice	N 50° 34´ 27.47", E 13° 39´ 46.85"	Teodoridis & Kvaček (2006)	early Miocene	Burdigalian (Karpatian)	16.5–16.7	CA, LMA, IPR*	Teodoridis (2010)
Cypris Formation	N 50° 10´ 43.17", E 12° 32´ 59.15" (Sokolov Basin), N 50° 5´ 51.25", E 12° 23´ 3.52" (Cheb Basin)	Bůžek <i>et al.</i> (1996)	early Miocene	Burdigalian (Karpatian)	17–21 (MN4b–MN5)	CA, LMA, CLAMP, IPR	–
Kundratice–Jezeří (micaceous facie)	N 50° 33´ 21.52", E 13° 30´ 15.22"	Teodoridis & Kvaček (2006)	early Miocene	Burdigalian (Otnagian)	?	CA, LMA, IPR*	Teodoridis (2010)
Břešťany	N 50° 17´ 4.64", E 14° 6´ 59.30"	Kvaček & Teodoridis (2007), Teodoridis & Kvaček (2006)	early Miocene	Burdigalian	18.5–20.5 (MN3)	CA, LMA, CLAMP*, IPR**	*Mach <i>et al.</i> (2014), **Teodoridis (2010)
Přivlaky	N 50° 17´ 4.64", E 14° 6´ 59.30"	Teodoridis (2006)	early Miocene	Burdigalian	18.5–20.5 (MN3)	CA, LMA, CLAMP*, IPR**	*Mach <i>et al.</i> (2014), **Teodoridis (2010)
Holedeč	N 50° 16´ 37.39", E 13° 33´ 45.95"	Teodoridis (2002)	early Miocene	Aquitanian/Burdigalian (Eggenburgian)	?	CA, LMA, CLAMP*, IPR**	*Mach <i>et al.</i> (2014), **Teodoridis (2010)
Čermníky	N 50° 21´ 59.95", E 13° 21´ 22.89"	Bůžek (1971)	early Miocene	Aquitanian/Burdigalian (Eggenburgian)	?	CA, LMA, CLAMP*, IPR**	*Mach <i>et al.</i> (2014), **Teodoridis (2010)
Brandis (Brandis FA)	N 51° 19´ 58.80", E 12° 36´ 0.00"	Mai & Walther (1991)	early Miocene	Burdigalian	18.5–20.5	CA*, IPR	*Utescher <i>et al.</i> (2009)
Bitterfeld (Bitterfeld FA)	N 51° 37´ 1.20", E 12° 19´ 1.20"	Mai & Walther (1991)	early Miocene	Aquitanian	20.4–23.0	CA*, LMA, CLAMP**, IPR	*Utescher <i>et al.</i> (2009), **Mach <i>et al.</i> (2014)
Witznitz (Mockrhena-Witznitz FA)	N 51°8´ 37.742", E 12°29´ 3.077"	Mai & Walther (1991)	late Oligocene / early Miocene	Aquitanian/Chattian	22.0–26.0	CA*, LMA**, CLAMP**, IPR	*Mosbrugger <i>et al.</i> (2005), **Mach <i>et al.</i> (2014)
Mockrehna (Mockrhena-Witznitz FA)	N 51°30´ 35.180", E 12°48´ 59.922"					IPR	
Hlavačov Gravel and Sand	N 50° 7´ 21.81", E 13° 44´ 16.04"	Teodoridis (2002)	late Oligocene / early Miocene	Aquitanian/Chattian	22.0–26.1	CA, LMA, CLAMP, IPR*	Teodoridis (2010)
Borna-Ost (Thierbach FA)	N 51° 7´ 48.00", E 12° 28´ 12.00"	Mai & Walther (1991)	late Oligocene	Chattian	23.8–28.5	CA*, LMA, CLAMP, IPR	*Roth-Nebelsick <i>et al.</i> (2004)
Bockwitz (Thierbach FA)	N 51°1´ 26.013", E 12°12´ 33.973"		late Oligocene	Chattian	23.8–28.5	CA*, LMA, CLAMP, IPR	*Mosbrugger <i>et al.</i> (2005)
Počerný–Podlesí	N 50° 14´ 18.91", E 12° 48´ 31.71"	Holý (1984), Kvaček & Walther (2001)	late Oligocene	Chattian	?	CA, IPR	–
Kleinsaubernitz	N 51° 15´ 0.00", E 14° 6´ 0.00"	Walther (1999)	late Oligocene	Chattian	26.2–27.0 (SPP zone 20G)	CA*, LMA, CLAMP, IPR	*Roth-Nebelsick <i>et al.</i> (2004), *Mosbrugger <i>et al.</i> (2005)
Matrý	N 50° 35´ 50.26", E 14° 5´ 50.35"	Radoň (2001), Soukupová (2004)	late Oligocene	Chattian	? 24	CA, LMA, CLAMP, IPR	–
Markvartice–Veselíčko	N 50° 25´ 51.78", E 15° 11´ 47.90"	Bůžek <i>et al.</i> (1976)	early Oligocene	Rupelian	?	CA, LMA, CLAMP, IPR	–
Sulestice – Berand	N 50° 38´ 28.96", E 14° 10´ 6.11"	Kvaček & Walther (1995)	early Oligocene	Rupelian	26.0–29.0	CA, LMA, CLAMP, IPR	–
Nerchau (Nerchau FA)	N 51° 16´ 1.20", E 12° 48´ 0.00"	Mai & Walther (1991)	early Oligocene	Rupelian	28.5–33.7	CA*, IPR	*Mosbrugger <i>et al.</i> (2005)
Knížecí–Hrazený	N 51° 0´ 14.13", E 14° 26´ 34.34"	Knobloch (1961), Kvaček & Walther (2001)	early Oligocene	Rupelian	29.5±1.5	CA, LMA, CLAMP, IPR	–
Seifhennersdorf	N 50° 56´ 7.02", E 14° 36´ 26.99"	Walther & Kvaček (2007)	early Oligocene	Rupelian	30.44 ± 1.25	CA*, LMA**, CLAMP**, IPR**	*Mosbrugger <i>et al.</i> (2005), **Kvaček <i>et al.</i> (2014)
Holý Kluk	N 50° 40´ 6.23", E 13° 50´ 8.55"	Radoň <i>et al.</i> (2006)	early Oligocene	Rupelian	30.9±1.5	CA*, LMA, CLAMP*, IPR*	*Kvaček <i>et al.</i> (2014)
Hammerunterwiesenthal	N 50° 34´ 36.89", E 13° 0´ 17.52"	Walther (1998)	early Oligocene	Rupelian	30.5	CA*, CLAMP*, IPR*	*Kvaček <i>et al.</i> (2014)
Kundratice	N 49° 24´ 8.94", E 16° 8´ 6.76"	Kvaček & Walther (1998)	early Oligocene	Rupelian	32.75 ± 0.82	CA*, LMA, CLAMP*, IPR*	*Kvaček <i>et al.</i> (2014)
Bechlejovice	N 50° 45´ 23.77", E 14° 14´ 16.55"	Kvaček & Walther (2004)	early Oligocene	Rupelian	?	CA*, LMA, CLAMP*, IPR*	*Kvaček <i>et al.</i> (2014)
Beucha	N 51° 19´ 48.00", E 12° 33´ 0.00"	Mai & Walther (1978)	early Oligocene	Rupelian	33.0–33.7	CA*	*Roth-Nebelsick <i>et al.</i> (2004)
Regis	N 51° 9´ 0.00", E 12° 25´ 12.00"		early Oligocene	Rupelian	33.0–33.7	CA*	*Roth-Nebelsick <i>et al.</i> (2004)
Haselbach 1	N 51° 8´ 24.00", E 12° 24´ 36.00"		early Oligocene	Rupelian	33.0–33.7	CA*, CLAMP**, IPR	*Roth-Nebelsick <i>et al.</i> (2004)
Haselbach 1, Beucha (Haselbach FA)	–		early Oligocene	Rupelian	33.0–33.7	LMA*, CLAMP*	*Kvaček <i>et al.</i> (2014)
Valeč	N 50° 10´ 27.14", E 13° 15´ 15.21"	Bůžek <i>et al.</i> (1990a), Fejfar & Kvaček (1993)	early Oligocene	Rupelian	? 33.9–32.6 (? MP 21)	CA*	*Kvaček <i>et al.</i> (2014)
Roudníky	N 50° 38´ 57.96", E 13° 55´ 10.51"	Kvaček <i>et al.</i> (2014)	late Eocene	Priabonian	35.4 ± 0.9	CA*, LMA*, CLAMP*, IPR*	*Kvaček <i>et al.</i> (2014)
Knau	N 51° 4´ 12.00", E 12° 22´ 48.00"	Mai & Walther (1985, 2000), Kunzmann & Walther (2002), Hennig & Kunzmann (2013), Ferdani (2014)	late Eocene	Priabonian	35.5–37.0 (SPP zone 18)	CA*, LMA	*Mosbrugger <i>et al.</i> (2005)
Kayna-Süd	N 51° 16´ 32.38", E 11° 56´ 48.59"		late Eocene	Priabonian	35.5–37.0 (SPP zone 18)	IPR*	Teodoridis <i>et al.</i> (2012)
Klausa	N 50° 57´ 34.42", E 12° 30´ 43.03"		late Eocene	Priabonian	35.5–37.0 (SPP zone 18)	IPR*	Teodoridis <i>et al.</i> (2012)
Haselbach (Zeitz Sand)	N 51° 8´ 24.00", E 12° 24´ 36.00"		late Eocene	Priabonian	35.5–37.0 (SPP zone 18)	CA*, LMA, IPR**	*Mosbrugger <i>et al.</i> (2005), **Teodoridis <i>et al.</i> (2012)
Haselbach, Klausa, Knau (Zeitz Floristic Assemblage /FA/)	–		late Eocene	Priabonian	35.5–37.0 (SPP zone 18)	LMA, CLAMP*	Teodoridis <i>et al.</i> (2012)
Kučlín	N 50° 31´ 54.78", E 13° 47´ 46.27"	Kvaček & Teodoridis (2011)	late Eocene	Priabonian	38.3	CA, LMA*, CLAMP*, IPR*	Kvaček & Teodoridis (2011)
Staré Sedlo	N 50° 10´ 54.39", E 12° 43´ 11.37"	Knobloch <i>et al.</i> (1996), Teodoridis <i>et al.</i> (2012)	late Eocene	Priabonian	?	CA, LMA, CLAMP, IPR*	Teodoridis <i>et al.</i> (2012)
Český Chloumek	N 50° 6´ 51.89", E 12° 56´ 50.54"		late Eocene	Priabonian	?	IPR*	Teodoridis <i>et al.</i> (2012)
Nový Kostel	N 50° 12´ 58.36", E 12° 26´ 45.45"		late Eocene	Priabonian	?	IPR*	Teodoridis <i>et al.</i> (2012)