

A: Number of fossil-taxa (macrofossils and microfossils) from four middle Miocene localities (including one macrofossil horizon and four pollen zones - PZ) in the Yatağan Basin.

Pollen & spores, cysts:

Taxa total Eskihisar 94 (Algae 4, Spores 10, Gymn 9, Angios 71)

Taxa total Tınaz 103 (Fungus 1, Algae 7, Spores 9, Gymn 12, Angios 74)

Taxa total Salihpaşalar 96 (Algae 7, Spores 6, Gymn 11, Angios 72)

Taxa total Yenieskihisar 28 (Gymn 6, Angios 22)

Taxa total Yatağan Basin 182 (Fungus 1, Algae 9, Spores 17, Gymn 15, Angios 140)

Genus level Eskihisar 45 (Algae 2, Spores 3, Gymn 5, Angios 41)

Genus level Tınaz 45 (Fungus 1, Algae 2, Spores 3, Gymn 5, Angios 34)

Genus level Salihpaşalar 48 (Algae 2, Spores 5, Gymn 6, Angios 35)

Genus level Yenieskihisar 16 (Gymn 4, Angios 12)

Genus level Yatağan 66 (Fungus 1, Algae 2, Spores 7, Gymn 6, Angios 50)

Macro fossils:

Taxa total Eskihisar 55 (Gymn 5, Angios 50)

Taxa total Tınaz 56 (Gymn 3, Angios 53)

Taxa total Salihpaşalar 16 (Gymn 2, Angios 14)

Taxa total Yatağan Basin 77 (Gymn 5, Angios 72)

Genus level Eskihisar 27 (Gymn 3, Angios 24)

Genus level Tınaz 25 (Gymn 3, Angios 22)

Genus level Salihpaşalar 12 (Gymn 2, Angios 10)

Genus level Yatağan 27 (Gymn 3, Angios 24)

Micro and macro plant fossils from the Yatağan Basin	E PZ1	T PZ1	S PZ1	E PZ2	T PZ2	S PZ2	T PZ2/3	YE	Categories
Gymnosperms									
Ephedraceae									
<i>Ephedra</i> sp. (P)	+	+	+	+	+	+	+	+	Z
Cupressaceae									
Cupressaceae gen. indet. "non papillate" (P)	+	+	+	+	+	+	+		A, Z, C
Cupressaceae gen. indet. "papillate" (P)	+	+		+	+	+		+	A, Z
cf. <i>Glyptostrobus europaeus</i> (MF)				+	+	+			A
cf. <i>Taxodium</i> sp. (MF)					+	+			A
Pinaceae									
<i>Cathaya</i> sp. (P)	+	+	+	+	+	+	+	+	A, Z
<i>Cedrus</i> sp. (P)	+	+	+	+	+	+	+	+	Z
<i>Picea</i> sp. (P)	+		+			+			Z
<i>Pinus</i> subgenus <i>Strobus</i> sp. (Haploxyton-pollen-	+	+	+	+	+	+	+	+	Z
<i>Pinus</i> subgenus <i>Pinus</i> sp. (Diploxyton-pollen-ty	+	+	+	+	+	+	+	+	Z
<i>Pinus</i> sp. (MF)				+		+			Z
<i>Tsuga</i> sp. (P)			+		+				Z
Angiosperms									
Adoxaceae									
<i>Viburnum</i> sp. (P)						+			A, Z
Altingiaceae									
<i>Liquidambar</i> sp. (P)		+	+			+			A, Z
<i>Liquidambar europaea</i> (MF)				+					A, Z
Amarantaceae									
Amaranthaceae sp. (P)	+	+	+	+	+	+	+	+	A, Z, C
Apiaceae (P)	+	+	+	+	+	+	+	+	A, Z, C
Aquifoliaceae									
<i>Ilex</i> sp. (P)					+	+			A, Z, C
Araliaceae									
Araliaceae gen. indet. (P)						+			A, Z, C
Asteraceae (P)	+	+	+	+	+	+	+	+	A, Z, C
Berberidiaceae									
<i>Mahonia grimmii</i> (MF)				+	+	+			A, Z
Betulaceae									
<i>Alnus</i> sp. (P)	+	+	+	+	+	+	+	+	A, Z
<i>Alnus cecropiifolia</i> (MF)				+	+				A, Z
<i>Alnus</i> cf. <i>julianiformis</i> (MF)				+					A, Z
<i>Betula</i> sp. (P)	+	+	+	+	+	+	+	+	
<i>Carpinus</i> sp. (P)	+	+	+	+	+	+		+	Z
<i>Carpinus grandis</i> (MF)				+	+				Z
<i>Carpinus</i> sp. 3 fruit types (MF)				+	+				Z
<i>Corylus</i> sp (P)	+	+	+	+	+	+	+		Z
<i>Ostrya</i> sp. (P)	+	+	+	+	+	+	+		Z
Buxaceae									
<i>Buxus</i> sp. (<i>balearica</i> type) (P)	+			+		+			Z
<i>Buxus pliocenica</i>				+	+				Z
Campanulaceae									
Campanuloideae gen. indet. (P)					+		+		Z, C
Cannabaceae									
<i>Celtis</i> vel <i>Pteroceltis</i> sp. (P)			+			+			Z
Caprifoliaceae									
<i>Lonicera</i> sp. (P)									A, Z
Linnaeoideae gen. indet. (P)									A, Z
Dipsacoideae (P)									A, Z, C
Valerianoideae (P)						+		+	A, Z
Caryophyllaceae			+			+			
Caryophyllaceae gen. indet. (P)								+	A, Z, C
Convolvulaceae									
<i>Convolvulus</i> sp. (P)	+	+			+				A, Z, C
Droseraceae									
<i>Drosera</i> sp. (P)			+						A, Z, C
Ericaceae									

Ericaceae gen. indet. (P)	+								A, Z, C
<i>Erica</i> sp. (P)	+								A, Z
Eucommiaceae									
<i>Eucommia</i> sp. (P)	+	+	+	+	+	+	+		Z
Euphorbiaceae									
Euphorbiaceae gen. indet. (P)	+	+	+	+	+	+			A, Z, C
Fabaceae									
<i>Apios</i> sp. (P)	+								A, Z
Fabaceae gen. et spec. indet 1–7 (MF)				+	+				A, Z
Fagaceae									
<i>Fagus</i> sp. (P)	+	+	+	+	+	+	+		Z
<i>Fagus gussonii</i> (MF)				+	+				Z
<i>Quercus</i> subgen. <i>Cerris</i> sect. <i>Cerris</i> sp. (P)	+	+	+	+	+	+	+	+	Z
<i>Quercus kubinyii</i> (MF)				+	+				Z
<i>Quercus</i> subgen. <i>Cerris</i> sect. <i>Ilex</i> sp. (P)	+	+	+	+	+	+	+	+	Z
<i>Quercus drymeja</i> (MF)				+	+	+			Z
<i>Quercus mediterranea</i> (MF)				+	+	+			Z
<i>Quercus sosnowskyi</i> (MF)				+	+	+			Z
<i>Quercus</i> sp. cupule (MF)				+	+				Z
<i>Quercus</i> subgen. <i>Quercus</i> sect. <i>Quercus</i> sp. (P)	+	+	+	+	+	+	+	+	Z
<i>Quercus gigas</i> (MF)				+	+				Z
Castanoideae gen. indet. (P)	+	+		+	+		+	+	Z
Geraniaceae									
<i>Erodium</i> sp. (P)	+	+	+	+	+		+		A, Z, C
Hamamelidaceae									
<i>Parrotia</i> sp. (P)								+	Z
Juglandaceae									
Engelhardioideae gen. indet. sp. (P)	+	+	+	+	+	+			A, Z
<i>Carya</i> sp. (P)	+	+	+	+	+	+	+	+	A, Z
<i>Carya</i> cf. <i>minor</i> (MF)				+					A, Z
<i>Juglans</i> sp. (P)	+		+	+		+		+	Z
<i>Juglans acuminata</i> (MF)				+	+	+			Z
<i>Pterocarya</i> vel <i>Cyclocarya</i> sp. (P)	+		+	+		+		+	A, Z
<i>Pterocarya paradisiaca</i> (MF)					+				A, Z
Linaceae									
<i>Linum</i> sp. (<i>austriacum</i> type) (P)				+	+				Z, C
Lythraceae									
<i>Decodon</i> sp. (P)	+	+	+	+	+	+	+		A
Malvaceae									
Malvoideae gen. indet. (P)	+								A, Z
<i>Tilia</i> sp. (P)	+		+	+		+			Z
<i>Tilia</i> sp. (MF)				+	+				Z
Moraceae vel Urticaceae									
Moraceae vel Urticaceae gen. indet. (P)			+						A, Z, C
Myricaceae									
<i>Morella</i> vel <i>Myrica</i> sp. (P)	+	+	+	+	+	+	+	+	A, Z
<i>Myrica lignitum</i> (MF)				+	+	+			A, Z
Nitrariaceae									
<i>Nitraria</i> sp. (P)				+			+		A, Z
Nyssaceae									
<i>Dicotylophyllum</i> 14 aff. <i>Nyssa</i> (MF)					+				A, Z
Oleaceae									
Oleaceae aff. <i>Olea</i> & <i>Chionanthus</i> (P)	+	+	+	+	+	+	+		Z
Oleaceae <i>Phillyrea</i> , <i>Linociera</i> & <i>Noronhia</i> (P)	+	+	+	+	+	+	+		Z
Oleaceae <i>Olea</i> , <i>Fontanesia</i> & <i>Osmanthus</i> (P)		+	+		+	+	+		Z
Oleaceae aff. <i>Olea</i> & <i>Osmanthus</i> (P)	+	+		+	+		+		Z
Oleaceae aff. <i>Fraxinus</i> (P)	+	+		+	+				A, Z
Oleaceae aff. <i>Ligustrum</i> (P)		+			+				Z
Onagraceae									
<i>Ludwigia</i> sp. (P)	+								A, C
Plumbaginaceae (P)				+	+				A, Z, C
Poaceae									
Poaceae sp. (P)	+	+	+	+	+	+	+		A, Z, C

<i>Phragmites</i> cf. <i>oehningensis</i> (MF)					+	+	+		A, C
Polygalaceae								+	A, Z, C
Polygonaceae									
<i>Persicaria</i> sp. (<i>P. amphibia</i> type) (P)									A, Z, C
<i>Polygonum</i> (<i>P. aviculare</i> type) (P)	+								A, Z, C
<i>Rumex</i> sp. (P)	+	+	+	+	+	+	+		A, Z, C
Ranunculaceae									
Ranunculaceae sp. (P)			+		+	+			A, Z, C
Rosaceae									
Rosaceae gen. indet. sp. (P)			+	+		+		+	A, Z, C
<i>Sorbus</i> sp. (MF)				+					Z
<i>Dicotylophyllum</i> 18 aff. <i>Spiraea</i> (MF)						+			A, Z
Salicaceae									
<i>Populus populina</i> (MF)				+	+	+			A
<i>Populus balsamoides</i> (MF)				+	+				A
<i>Populus</i> sp. aff. <i>P. grandidentata</i> (MF)				+					A
<i>Salix</i> sp. (P)		+	+				+		A
<i>Salix lavateri</i> (MF)				+	+				A
Sapindaceae									
<i>Acer</i> sp. (P)	+	+	+	+	+	+	+		A, Z
cf. <i>Acer aegopodifolium</i> (MF)						+			Z
<i>Acer dasycarpoides</i> (MF)				+	+				A, Z
<i>Acer decipiens</i> (MF)						+			Z
<i>Acer ilnicense</i> (MF)				+	+				Z
<i>Acer integrilobium</i> (MF)				+	+		+		Z
<i>Acer pyrenaicum</i> (MF)				+	+				Z
<i>Acer subcampestre</i> (MF)						+			Z
<i>Acer tricuspidatum</i> (MF)				+	+		+		A, Z
<i>Acer</i> sp. 3 samara types (MF)				+	+				A, Z
<i>Sapindus falcifolius</i> (MF)				+	+				Z
Sapotaceae									
Sapotoideae gen. indet. sp. (P)						+	+		A, Z
Simaroubaceae									
aff. <i>Ailanthus</i> sp. (P)	+								Z
<i>Picrasma</i> sp. (P)		+							Z
Smilacaceae									
<i>Smilax</i> sp. (<i>aspera</i> type) (P)						+			A, Z
<i>Smilax miohavanensis</i> (L)				+	+	+			A, Z
Typhaceae									
Typhaceae gen. indet. (P)	+	+	+	+	+	+	+		A, C
<i>Typha</i> cf. <i>latissima</i> (MF)						+	+		A, C
Ulmaceae									
<i>Ulmus</i> sp. (P)	+	+	+	+	+	+	+	+	A, Z
<i>Ulmus longifolia</i> (MF)				+					A
<i>Zelkova</i> sp. (P)	+	+	+	+	+	+	+	+	A, Z
<i>Zelkova zelkovifolia</i> (MF)				+	+	+			A, Z

E = Eskihisar
T = Tınaz
S = Salihpaşalar
YE = Yenieskihisar
PZ = Pollen Zone
A = Azonal
Z = Zonal
C = Cosmopolitan