

KRYSZYNA BORATYŃSKA

Distributions of *Populus tremula* L. in southwestern Asia*

The range of *Populus tremula* L. in southwestern Asia covers almost the whole of Turkey and partially Lebanon. The most easterly stands are in Anatolia near Yüksekova (vilayet Hakkari), and the most southerly ones in Lebanon near Bikfaya (Fig. 1). In Iran this aspen is not known (Neumann, Skvortsov 1969).

In Turkey *P. tremula* grows commonly along the shores of the Black Sea, and in eastern (vilayet Çoruh, Erzurum, Bitlis, Hakkari) and southern Anatolia (vilayet Maraş, Amanus, Antalya, Denizli and others). It can be found both in the lowlands and high up in the mountains, where in the upper elevations it is known only in a shrub form. It grows in polyspecific forests, on various soils — from river alluvia to shallow mountain stony soils.

In northern Anatolia *P. tremula* occurs in the lowlands and also in the mountains to an elevation of 2200 m (Stainton, Henderson *in sched.* 5355). In the lowlands on the Black Sea this aspen occurs most commonly with *Carpinus betulus*, *Rhododendron ponticum*, *Ilex aquifolium*, *Corylus colurna*, *Laurus nobilis* (Zohary 1973), while in the mountains together with *Alnus glutinosa*, *Carpinus betulus*, *Fagus orientalis*, *Quercus colchica*, *Q. polycarpa*, *Acer platanoides*, *Abies normandiana*, *Pinus silvestris*, *P. armena*, *P. hamata*, *Salix purpurea*, *Sorbus torminalis*, *S. aria*, *Viburnum lantana*, *Ligustrum vulgare*, *Prunus mahaleb*, *Evonymus latifolia*, *Crataegus monogyna* (Czeczott 1939, Zohary 1973).

In southern Turkey aspen grows on scattered stands, usually only in the mountains. The most elevated stands of this species are in Erdschias-Dağh up to 2500 m (Penther, Zederbauer 1905) and in vilayet Hakkari up to 2300 m (Davis, *in sched.* 23508, 23510, 44476). In the Amanus Mts. it is reported from as high up as 1500 - 1700 m (Tölg 1919).

An extension of the range southwards occurs as scattered stands in Lebanon. Three such stands are known, one near Bikfaya, the second near Ain Zahalta and the third close to Zahlé. It is not quite clear

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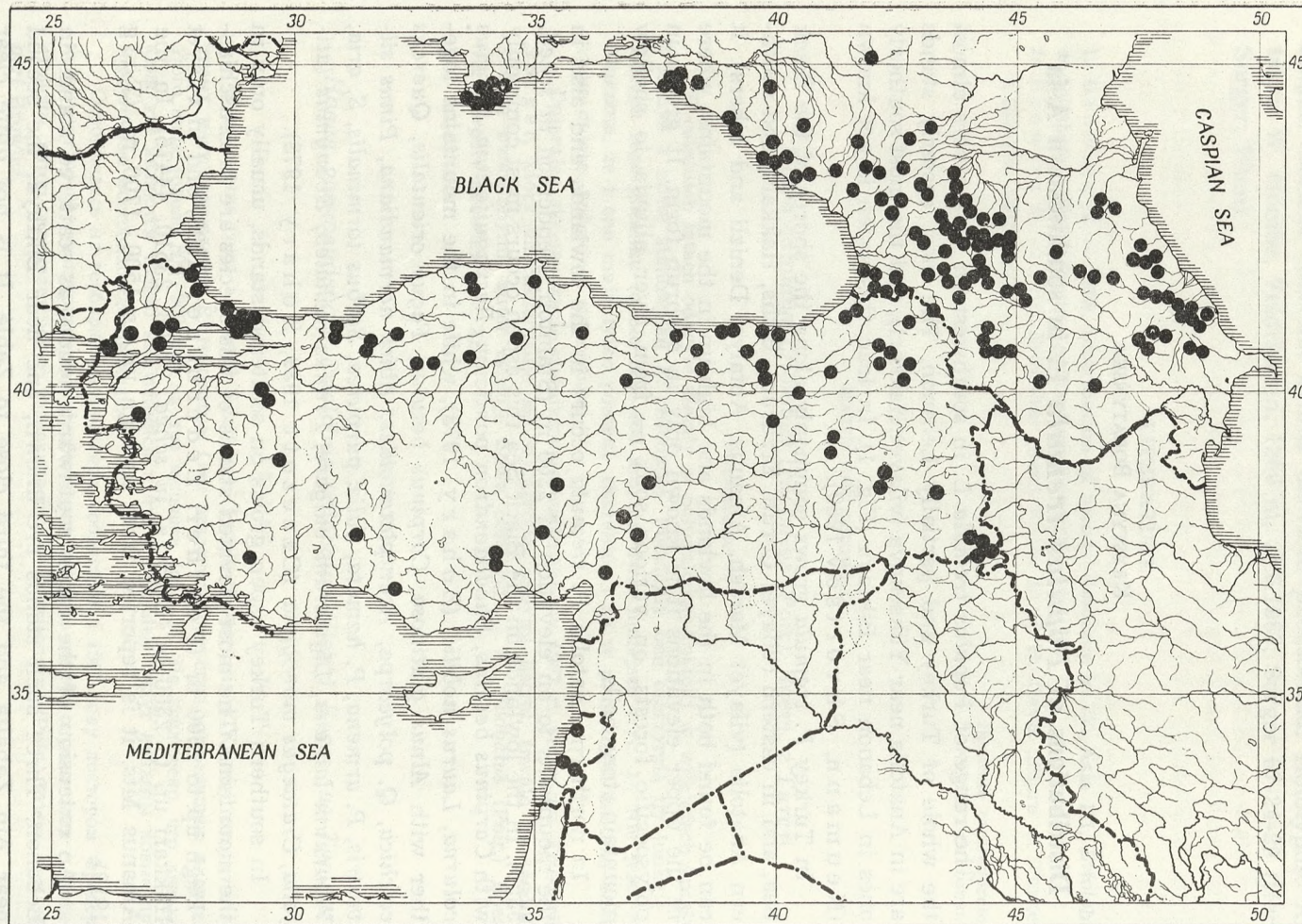


Fig. 1. Distribution of *Populus tremula* L.

whether the cited stands are fully natural. In the climate of the region aspen finds best conditions for its growth on mor soils on elevations above 1000 m (Mouterde 1966).

In the Caucasus bordering on Anatolia *P. tremula* is a much more common species, occurring primarily in the mountains. The most elevated stands there attain 2200 m (Ssorin 1951). It grows in deciduous forests most commonly along streams and rivers. A detailed map of its distribution in that region has been published by A. A. Grossheim (1945) who reports also several stands of aspen from northeastern Turkey. A list of stands of *P. tremula* on Crimea has been published by E. Wulf (1947).

LOCALITIES IN W. ASIA

TURKEY

a) European Part: Istranca Dağları, Demirköy-Iğneada, 23.6.1960, Kayacık 25 (E.); *ibid.*, 1968, Baytop 13, 134 (E.); Belgrad Forest, near Bahçeköy, 20.5.1960, Yaltirik 1293 (E., ISTO.); Çilingöz, Midye, Makyadağ, Yeşilköy (Herman 1936); Terkos Göl; Enez, Keşan, Malkara, Tekirdağ; Inecik, by streams in Ganosdağı, Kilyas; Büyükdere (Weeb 1966).

b) Asiatic Part: Kocaeli: Durca a. Erenköy, 820 m (Çetik 1965); Sakarya: circa Hendek, in declivii meridionali montis Ohlamurluk (vallis Ulu-Dere) in querceto, ca. 400 m rarior, 24.6.1926, Czeczott 77 (Czeczott 1939); Karasu-Akçakoça, 20 - 100 m (Zohary 1973); Zonguldak: nördl. Yeniçaga, 1250; Bolu: unterhalb vom Abant Gölü, 1150 m; nördl. Bolu, 1300 m (Wagenitz 1963); Ankara: Karagöl, 40 mil N. of Ankara, 1600 m, 10.6.1965, Coode, Jones 2173 (E.); circa oppidulum Arab, in parte superiore vallis Yaila-Czai, in fruticetis ad rivulum, 1600 m, 19.7.1925, Czeczott 871 (Czeczott 1939); 63 km NNW von Ankara bei Kizilcahamam (Corkorum) in offen Stellen des Kiziltepe Waldes, 1400 m (Papaioannou 1973); Kastamonu: Seydiler to Küre, 1200 m, 30.7.1962, Davis 38467 (E.); Küre Nahas, 2.9.1892, Sintenis 5117 (JE., P.); in declivii orientali montium supra oppidulum Küre, in angustus ca 1250 m, 5.8.1925, Czeczott 685; from Edjevid, 1112; from Edjevid to Küre, 1258 (Czeczott 1939); Sinop: Gerze-Boyabat, 1200 m, 7.9.1954, Davis 25034 (E.); Samsun: Ak Dag from Dere Başalan Köy, 1200 m, 19.5.1965, Tobey 974 (E.); Çorum; Iskilip, Kebabdere above Karmis, 1300 m, 29.5.1965, Coode, Jones, 1768 (E.); Sivas: Yildiz Dağ, 2200 m Stinton, Henderson 5355 (E.); Ordu: Bender Erekli (H.-Mazzetti 1909); Giresun: Eğribel Pass — Sebinkarahisar, 1700 - 1850 m; Yavuzkernal-Eğribel Pass, 850 - 1700 m (Zohary 1973); Trabzon: Elewy Deressi, Görele, 50 m (H.-Mazzetti 1909); distr. Gümüsane, 40 km SE of Gümüsane, 21.5.1975, Browicz, Zieliński (in observ.); Koese Dag/Köse Dağ/, 20.8.1890, Sintenis (JE.); Ziganagebirges (Schiechtel, Stern, Weiss 1965); *ibid.*, 1350 m (Zohary 1973); Bei Souk Su ober Trapezunt, 100 m (H.-Mazzetti 1909); Trabzon, 250 m, 14.5.1931, Görz 26/K./; Arsin, 22.5.1975, Browicz, Zieliński (in observ.); Fol Köy (Krause 1930); Murgul: Petek, 1220 m (Çetik 1965); above the Bakir Madeni perhaps 5 km east of Murgul (ca 15 km south of Borçka), 1200 m, 23.9.1965, Murray 944 (E.); Tunceli: Munzur Dag, in Aksu Dere above Ovaçık, 1700 m, 21.7.1957, Davis 31500 (E.); Pülümür, ca 1950 m, 18.5.1975, Browicz Zieliński (in observ.); Erzurum: in itinere Chris-kala versus (Trautvetter 1876); Bingöl Dag, 2400 m (Zohary 1973); Aşkale, 2000 m, 21.5.1975, Browicz, Zieliński (in observ.); in declivibus septentriona-

libus ad flavum Sonamer-Su, Chorum, 12.7.1916, Saposchnikov (Schischkin 1928); in valle silvatica flavium Chrys-czaj prope oppidulum Chrys-kala, 14.7.1916, Saposchnikov et Schischkin (Schischkin 1928). Kars: 12 km from Karakurt to Sarikamiş, 2000 m, 14.7.1966, Davis 46576 (E.); Van: N. side of Ereğ Dag, above Degirmenköy, 2300 m, 6.6.1966, Davis 44476 (E.); Bitlis: Boglan (Solhan), 1350 m, 3.9.1859, Kotschy 487 (JE., K., P.); Tatvan, 1900 m, 26.7.1966, Tong 30 (E.); Nemrut Dağı, 2300 m, 3.7.1954, Davis 23508, 23510 (E.); ibide. (Peşmen 1973); Hakkari: Sat Dağı between Yüksekova and Vazogoz, 1750 - 1850 m, 30.6.1966, Davis 45823 (E.); 3 km of Yüksekova, 2000 m, 29.6.1966, Lygon (E.); 5 km from Semdinli to Yüksekova, 1500 m, 16.6.1966, Davis 45017 (E.); distr. Hakkari: ad pagum Çerme in valle fluv. Zab dit. Koçanes, 1400 m (Nábělek 1929); Kayseri: in montibus Kassan Oghlu ad pagum Görünse, 12 - 1500 m, 22.5.1859, Kotschy 162 (JE., K., P.); Erdschias-Dagh: oberhalb Gereme, 1800 - 2500 m (Penther, Zederbauer 1905); Maraş: in Beryt Dağh, 2130 m, 8.8.1865; Ahir Dağı, 20.7.1865, Haussknecht (E., J.); Amanus: Sorkun Yaylasi, 1500 m (Kayacik 1956); ibid., 1963, Toklu 3146 (E., ISTO.); Cilicien: Ala Dagh, im Abies cilicica-Bestand des Emli Bogazi in 2050 m (Schiechtel, Stern, Weiss 1965); Ala-dagh, 1836, Wiedemann (L. E.); Gusguta, 1300 m, 1896, Siehe 230 (L. E.). Gusguta (Krause 1930); Mersin: Bulgar Dagh, 12.8.1953, Kotschy 311, 353d (K., P.); Aydos (Baytop 1962); Anatalya: Kargi chai, 900 m, 26.8.1947, Davis 14239 (E., K.); Konya: distr. Baysehir, Dedegöl dağ 1800 m, 4.8.1949, Davis 16081 (E., K.); Denizli: Boz dagh above Geyraz yayla, 1500 - 1700 m, 16.7.1947, Davis 13445 (E., K.); in monte Tmolo (Bornmüller 1908); Phrygien, Thabandag (Krause 1930); Lydia: between Simav a. Demirci, 1000 - 1300 m (Zohary 1937); Kütahya: Takta kopru, forest above Domaniç, 1100 m, 2.7.1962, Davis 36375 (E.); Murat-Dagh, 1800 m (Regel, Pamukçuoğlu 1965); Mysia: Ida, Sintenis 542 (Krause 1930); Kaz Dag, 1500 m (Regel, Pamukçuoğlu 1965); bithynischer Olymp (Krause 1930); Lebanon: entre Bikfaya et Dhour Choueir; col de Zahle (Mouterde 1966); ad Ain Zahalta, 18 - 20.6.1910, Bornmüller 12348 (JE.).

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KRYSZYNA BORATYŃSKA

Rozmieszczenie *Populus tremula* L. w południowo-zachodniej Azji

Streszczenie

Zasięg *Populus tremula* w południowo-zachodniej Azji obejmuje niemal całą Turcję i część Libanu. W Turcji osika rośnie pospolicie wzdłuż wybrzeży Morza Czarnego oraz w wschodniej i południowej Anatolii (ryc. 1). Pojawia się zarówno na nizinach, jak i wysoko w górach, gdzie często przyjmuje formę krzewiastą. Najwyżej sięga *P. tremula* na południu kraju w Erdschias-Dagh do 2500 m n.p.m. (Penther, Zederbauer 1905).

W Libanie osika znana jest tylko z trzech stanowisk i nie jest w pełni jasne, czy są one naturalne (Mouterde 1966).

Autorka sporządziła mapę rozmieszczenia *P. tremula* dla tego terenu oraz zebrała stanowiska na podstawie materiałów zielnikowych i danych z literatury.

КРЫСТИНА БОРАТЫŃСКА

Распространение *Populus tremula* L. в юго-западной Азии

Резюме

Ареал осины в юго-западной Азии охватывает почти всю Турцию и часть Ливана. В Турции она обильно растет вдоль побережья Черного моря, а также в восточной и южной Анатолии (рис. 1). Встречается как на низменностях, так и высоко в горах, где часто приобретает форму кустарника. Выше всего поднимается на юге страны (Эрджияс-Даг) — до 2500 м над ур. м. (Penther, Zederbauer 1905).

В Ливане осина известна только с трех местонахождений. Не вполне ясно — естественны ли они (Mouterde 1966).

Карта размещения *P. tremula* для изученного района составлена на основании гербарных материалов и литературных источников.