

# **Variation in Tree Species Ability to Capture and Retain Airborne Fine Particulate Matter (PM<sub>2.5</sub>)**

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## Species PM<sub>2.5</sub> accumulation & S.D. (ug.cm<sup>-2</sup>)

	Summer-Autumn	Spring	Summer-Autumn S.D	Spring S.D.
<i>Fraxinus pennsylvanica</i>	5.935	0.134	0.672	0.078
<i>Ailanthus altissima</i>	4.635	1.509	0.566	0.274
<i>Sophora japonica</i>	3.603	2.147	0.720	0.587
<i>Koelreuteria paniculata</i>	3.819	2.166	0.964	0.490
<i>Prunus Cerasifera</i>	4.144	2.278	0.724	0.463
<i>Syringa reticulata</i>	6.539	2.320	0.717	0.579
<i>Catalpa speciosa</i>	17.894	2.399	0.483	0.424
<i>Aesculus chinensis</i>	6.412	2.655	0.257	0.367
<i>Amygdalus triloba</i>	11.424	2.783	0.363	0.660
<i>Metasequoia glyptostroboides</i>	3.748	0.849	5.469	0.044
<i>Crataegus pinnatifida</i>	2.545	5.016	0.120	0.878
<i>Ginkgo biloba</i>	5.881	5.501	0.343	1.217
<i>Quercus variabilis</i>	9.755	7.503	0.302	1.407
<i>Ulmus pumila</i>	13.553	8.947	0.596	1.451
<i>Broussonetia papyrifera</i>	10.893	10.938	0.273	1.667
<i>Pinus armandii</i>	4.801		0.129	
<i>Platanus occidentalis</i>	3.135		0.053	
<i>Eucommia ulmoides</i>	2.623		0.151	
<i>Tilia tuan</i>	2.159		0.222	
<i>Armeniaca sibirica</i>	2.398		0.297	
<i>Parthenocissus thomsoni</i>	2.983		0.324	
<i>Malus micromalus</i>	2.499		0.299	
<i>Lonicera maackii</i>	3.007		0.289	
<i>Euonymus japonicus</i>	4.097		0.140	
<i>Philadelphus pekinensis</i>	5.888		0.310	
<i>Magnolia denudata</i>	13.191		1.900	
<i>Pinus tabuliformis</i>	83.385		3.360	
<i>Taxus cuspidatavar.nana</i>	10.182		2.800	
<i>Cedrus deodara</i>	29.690		1.920	
<i>Platyclusus orientalis</i>	30.111		3.901	
<i>Pinus armandii</i>	29.091		1.220	

## Weights of PM fractions

<b>Spring(ug.cm<sup>-2</sup>)</b>	TSP	PM>10	PM <sub>2.5-10</sub>	PM <sub>2.5</sub>
<i>Fraxinus pennsylvanica</i>	30.480	30.247	0.097	0.134
<i>Ailanthus altissima</i>	27.915	17.628	7.890	1.509
<i>Sophora japonica</i>	15.352	6.102	7.103	2.146
<i>Koelreuteria paniculata</i>	54.390	51.454	0.770	2.166
<i>Prunus Cerasifera</i>	74.641	64.115	8.248	2.278
<i>Syringa reticulata</i>	48.638	43.625	2.694	2.320
<i>Catalpa speciosa</i>	30.028	43.625	5.998	2.399
<i>Aesculus chinensis</i>	53.114	40.577	9.883	2.655
<i>Amygdalus triloba</i>	58.748	40.627	15.338	2.783
<i>Metasequoia glyptostroboides</i>	53.531	49.015	0.767	0.849
<i>Crataegus pinnatifida</i>	74.081	47.832	21.234	5.016
<i>Ginkgo biloba</i>	47.419	39.402	2.515	5.501
<i>Quercus variabilis</i>	117.336	100.582	9.251	7.503
<i>Ulmus pumila</i>	43.224	28.735	5.542	8.947
<i>Broussonetia papyrifera</i>	122.446	99.301	12.208	10.938

<b>Summer-autumn(ug.cm<sup>-2</sup>)</b>	TSP	PM>10	PM <sub>2.5-10</sub>	PM <sub>2.5</sub>
<i>Fraxinus pennsylvanica</i>	11.873	5.407	0.531	5.935
<i>Ailanthus altissima</i>	21.106	16.239	0.232	4.635
<i>Sophora japonica</i>	9.904	6.044	0.258	3.603
<i>Koelreuteria paniculata</i>	10.481	6.311	0.352	3.819
<i>Prunus Cerasifera</i>	9.439	5.072	0.223	4.144
<i>Syringa reticulata</i>	12.257	5.342	0.376	6.539
<i>Catalpa speciosa</i>	24.748	6.743	0.111	17.894
<i>Aesculus chinensis</i>	14.850	8.407	0.031	6.412
<i>Amygdalus triloba</i>	20.847	9.141	0.282	11.424
<i>Metasequoia glyptostroboides</i>	17.990	11.698	2.543	3.748
<i>Crataegus pinnatifida</i>	71.570	47.812	21.214	2.545
<i>Ginkgo biloba</i>	10.068	3.840	0.347	5.881
<i>Quercus variabilis</i>	23.202	13.334	0.114	9.755
<i>Ulmus pumila</i>	26.533	12.659	0.322	13.553
<i>Broussonetia papyrifera</i>	24.310	13.164	0.253	10.893
<i>Pinus armandii</i>	36.497	5.847	25.848	4.801
<i>Platanus occidentalis</i>	14.017	10.263	0.619	3.135
<i>Eucommia ulmoides</i>	32.504	21.191	8.690	2.623
<i>Tilia tuan</i>	12.767	8.528	2.081	2.159
<i>Armeniaca sibirica</i>	6.814	4.065	0.352	2.398
<i>Parthenocissus thomsoni</i>	67.843	59.973	4.887	2.983
<i>Malus micromalus</i>	7.161	4.382	0.280	2.499
<i>Lonicera maackii</i>	12.787	9.234	0.546	3.007
<i>Euonymus japonicus</i>	26.158	18.555	3.506	4.097
<i>Philadelphus pekinensis</i>	17.754	11.416	0.450	5.888
<i>Magnolia denudata</i>	29.014	14.091	1.733	13.191
<i>Pinus tabuliformis</i>	130.276	103.373	3.518	23.385
<i>Taxus cuspidatavar.nana</i>	18.491	7.796	0.513	10.182
<i>Cedrus deodara</i>	57.465	18.555	9.221	29.690

<i>Platycladus orientalis</i>	55.727	21.631	3.985	30.111
<i>Pinus armandii</i>	57.776	23.459	5.226	29.091