#### **About This Report**

Region: Oregon

**Species: Celastrus orbiculatus** 

Date: February 14, 2025

This report was generated by the Climate Match Tool at <a href="https://weedmap.cal-ipc.org/climatematch/">https://weedmap.cal-ipc.org/climatematch/</a>. It is designed for users in the U.S. to help compare two sets of data: (1) the current known worldwide distribution of a given plant species and (2) areas of the world with climatic parameters matching a user-selected part of the U.S. This allows users to determine whether the plant is found in other areas with a similar climate to the region of interest in the U.S.

Such information is useful when assessing the potential for a plant species to be invasive in a given region. This tool was developed by the PlantRight project (<a href="https://www.plantright.org">www.plantright.org</a>) to assist horticultural partners in screening potential new plant introductions. The tool is now also supported by the California Invasive Plant Council (<a href="https://www.cal-ipc.org">www.cal-ipc.org</a>) to help land managers assess the future risk of nonnative plants already found growing in the wild. The tool is built and maintained by GreenInfo Network (<a href="https://www.greeninfo.org">www.greeninfo.org</a>).

Contact us at info@cal-ipc.org.

#### **Data Layer Methods**

To assess "climate matchâ€, this tool compares the values for a set of climatic parameters in the selected region of interest with values for those same parameters around the world. The three climatic parameters considered are precipitation (in bands of 10 inches annual precipitation), USDA hardiness zone ("Hardiness"), and UN global ecological zone ("Ecozone"). By combining all three ("Combined"), the tool determines which areas around the globe match at least a part of the region of interest.

Data for precipitation bands and plant hardiness zones: "The NCEP Climate Forecast System Reanalysis," in Bulletin of the American Meteorological Society, August 2010. <a href="https://www.cpc.ncep.noaa.gov/products/people/yxue/pub/27.pdf">https://www.cpc.ncep.noaa.gov/products/people/yxue/pub/27.pdf</a>

Methods for precipitation bands and plant hardiness zones: "Global plant hardiness zones for phytosanitary risk analysis," in Scientia Agricola 65:54-59, 2008. <a href="https://www.scielo.br/j/sa/a/QpBRyPmZQTXsG6VrQYmv9zy/?lang=en&format=pdf">https://www.scielo.br/j/sa/a/QpBRyPmZQTXsG6VrQYmv9zy/?lang=en&format=pdf</a>

Global ecozones: "Global ecofloristic zones mapped by the United Nations Food and Agricultural Organization," 2008. <a href="https://databasin.org/datasets/dc4f6efd1fa84ea99df61ae9c5b3b763/">https://databasin.org/datasets/dc4f6efd1fa84ea99df61ae9c5b3b763/</a>

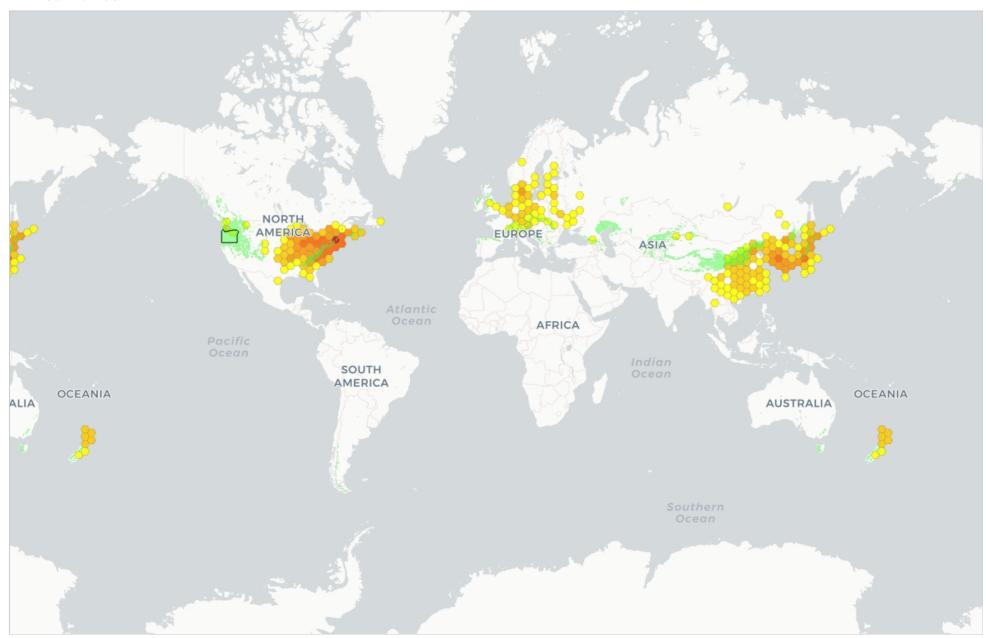
Plant species distribution: Global Biodiversity Information Facility (GBIF). https://www.gbif.org/

The data presented on the map has a resolution of 0.1 degrees (approximately 10,500m square).

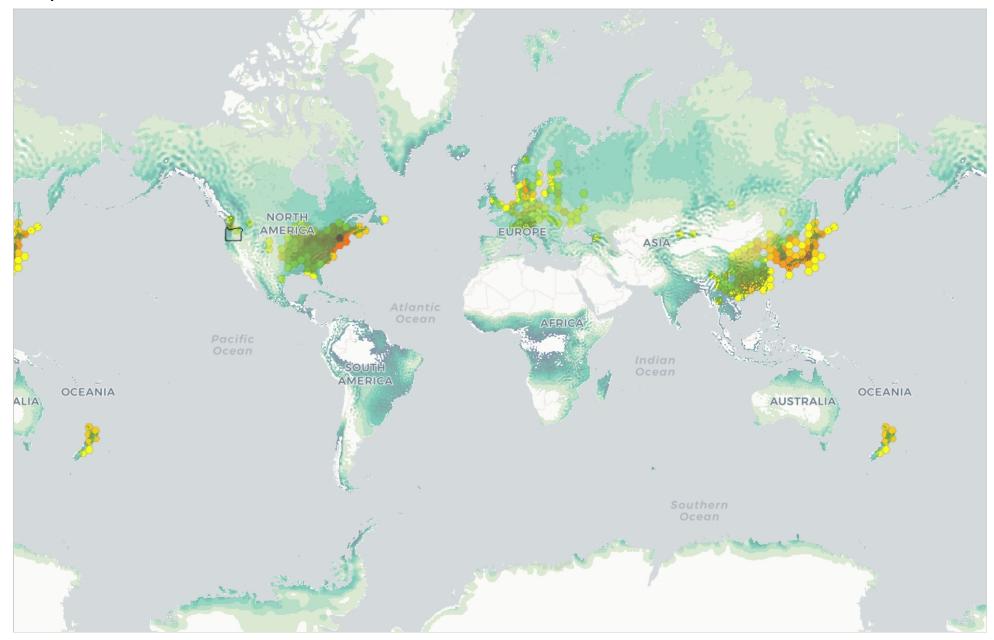
### **Selected Areas and Map Legends**

Selected States	Precipitation	Plant Hardiness Zones	<b>UN Global Ecological Zones</b>
Oregon	0-10in / 0-25cm 10-20in / 25-51cm 20-30in / 51-76cm 30-40in / 76-102cm	Zone 1 Zone 2 Zone 3 Zone 4	Tropical rainforest Tropical moist forest Tropical dry forest Tropical shrubland
	40-50in / 102-127cm 50-60in / 127-152cm 60-70in / 152-178cm 70-80in / 178-203cm 80-90in / 203-229cm 90-100in / 229-254cm 100+ / 254+	Zone 5 Zone 6 Zone 7 Zone 8 Zone 9 Zone 10 Zone 11 Zone 12	Tropical desert Tropical mountain system Tropical humid forest Subtropical dry forest Subtropical steppe Subtropical desert Subtropical mountain system Temperate oceanic forest
		Zone 13	Temperate continental forest Temperate steppe Temperate desert Temperate mountain system Boreal coniferous forest Boreal tundra woodland Boreal mountain system Polar Water

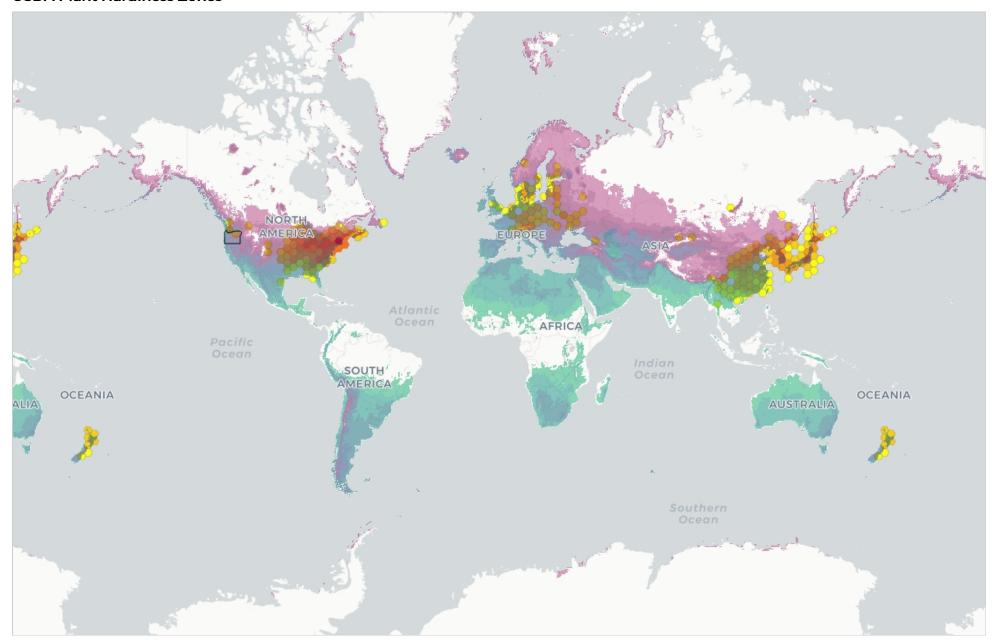
#### **PRE Combined**



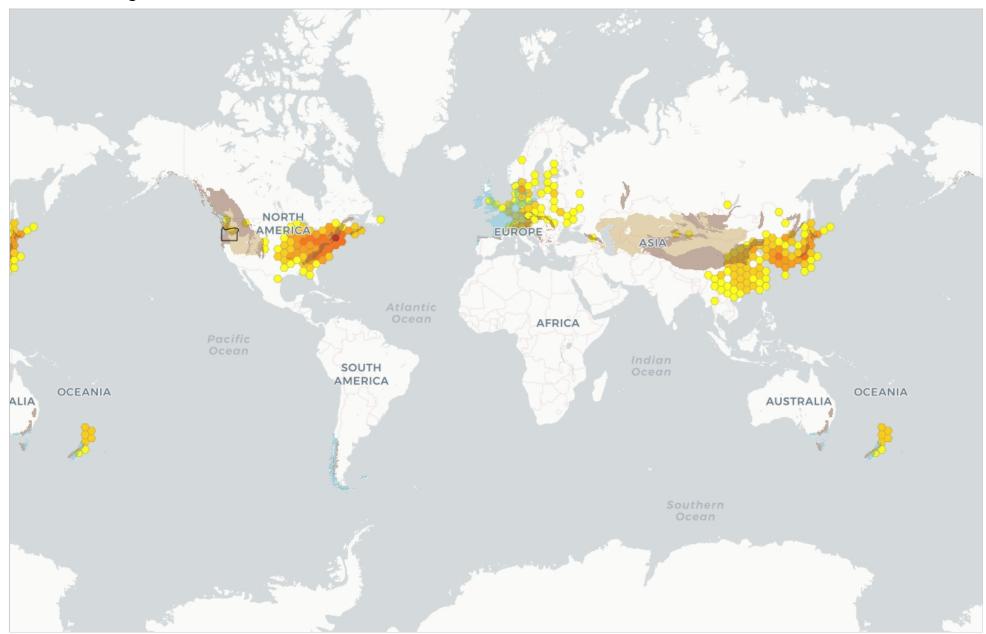
### **Precipitation**



#### **USDA Plant Hardiness Zones**



### **UN Global Ecological Zones**



Hardiness	Precipitation	UN Ecozone	Hardiness	Precipitation	UN Ecozone
Zone 4	30-40in / 76-102cm	Temperate mountain system	Zone 9	50-60in / 127-152cm	Temperate mountain system
Zone 5	10-20in / 25-51cm	Temperate mountain system	Zone 9	50-60in / 127-152cm	Temperate oceanic forest
Zone 5	20-30in / 51-76cm	Temperate mountain system	Zone 9	60-70in / 152-178cm	Temperate mountain system
Zone 5	30-40in / 76-102cm	Temperate mountain system	Zone 9	70-80in / 178-203cm	Temperate mountain system
Zone 5	40-50in / 102-127cm	Temperate mountain system	Zone 9	70-80in / 178-203cm	Temperate oceanic forest
Zone 6	10-20in / 25-51cm	Temperate desert	Zone 9	80-90in / 203-229cm	Temperate mountain system
Zone 6	10-20in / 25-51cm	Temperate mountain system	Zone 10	50-60in / 127-152cm	Temperate mountain system
Zone 6	20-30in / 51-76cm	Temperate desert	Zone 10	60-70in / 152-178cm	Temperate mountain system
Zone 6	20-30in / 51-76cm	Temperate mountain system	Zone 10	70-80in / 178-203cm	Temperate mountain system
Zone 6	30-40in / 76-102cm	Temperate desert	Zone 11	60-70in / 152-178cm	Temperate mountain system
Zone 6	30-40in / 76-102cm	Temperate mountain system			
Zone 6	40-50in / 102-127cm	Temperate desert			
Zone 6	40-50in / 102-127cm	Temperate mountain system			
Zone 6	50-60in / 127-152cm	Temperate desert			
Zone 6	50-60in / 127-152cm	Temperate mountain system			
Zone 6	60-70in / 152-178cm	Temperate desert			
Zone 6	60-70in / 152-178cm	Temperate mountain system			
Zone 6	70-80in / 178-203cm	Temperate mountain system			
Zone 6	80-90in / 203-229cm	Temperate mountain system			
Zone 7	10-20in / 25-51cm	Temperate desert			
Zone 7	10-20in / 25-51cm	Temperate mountain system			
Zone 7	20-30in / 51-76cm	Temperate desert			
Zone 7	20-30in / 51-76cm	Temperate mountain system			
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Zone 7	70-80in / 178-203cm	Temperate mountain system			
Zone 7	80-90in / 203-229cm	Temperate mountain system			
Zone 7	90-100in / 229-254cm	Temperate mountain system			
Zone 8	10-20in / 25-51cm	Temperate desert			
Zone 8	20-30in / 51-76cm	Temperate desert			
Zone 8	30-40in / 76-102cm	Temperate mountain system			
Zone 8	40-50in / 102-127cm	Temperate mountain system			
Zone 8	50-60in / 127-152cm	Temperate mountain system			
Zone 8	50-60in / 127-152cm	Temperate oceanic forest			
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Zone 8	90-100in / 229-254cm	Temperate mountain system			