#### **About This Report**

Region: Oregon

Species: Euphorbia dentata

Date: March 5, 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>

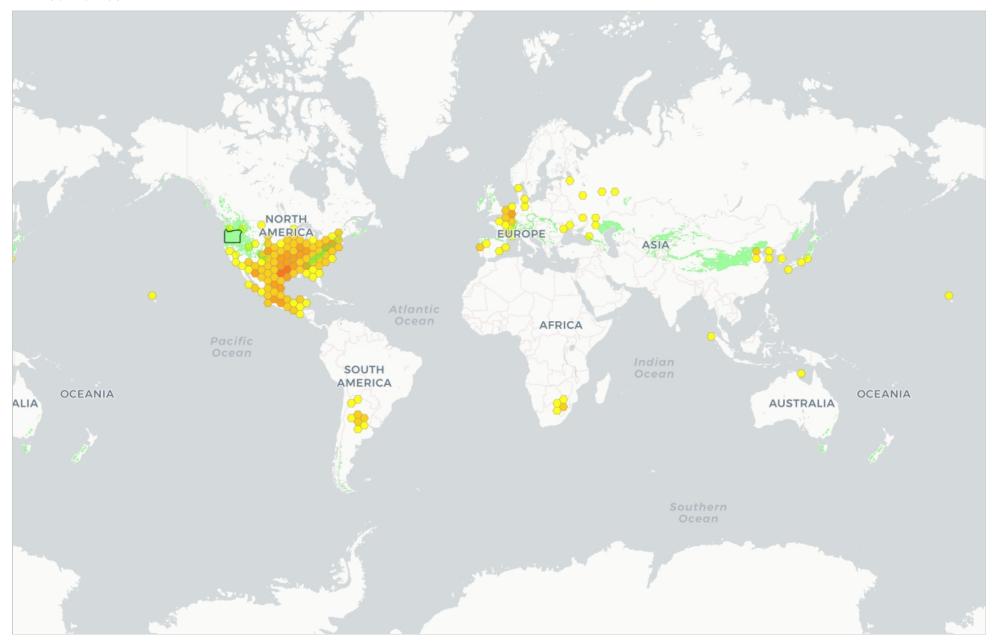
Plant species distribution: Global Biodiversity Information Facility (GBIF). https://www.gbif.org/

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

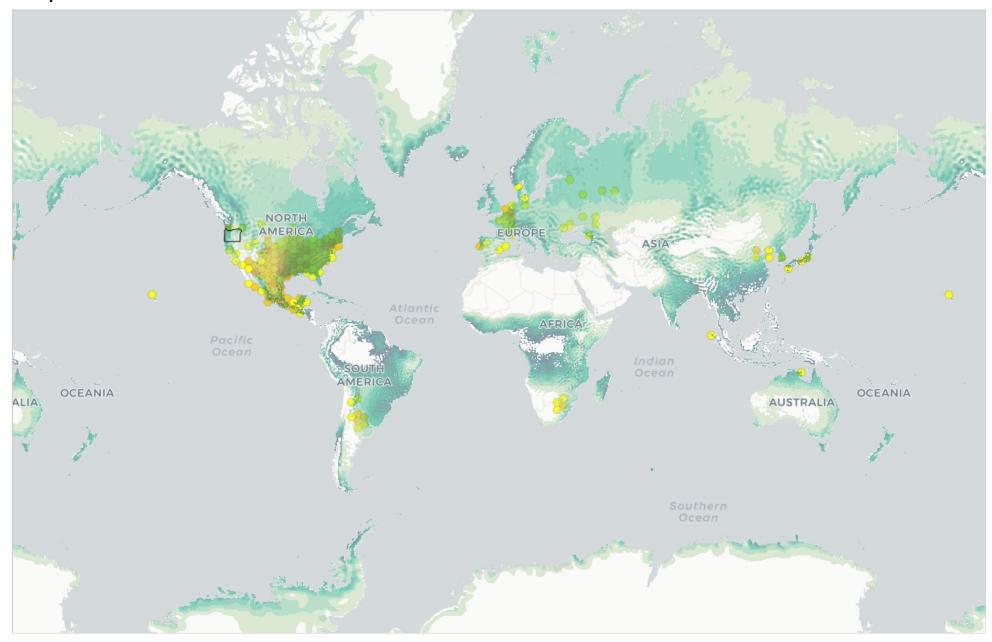
### **Selected Areas and Map Legends**

| Selected States | Precipitation  | Plant Hardiness Zones                                      | <b>UN Global Ecological Zones</b>  |
|-----------------|--|--|--|
| Oregon          | 0-10in / 0-25cm<br>10-20in / 25-51cm<br>20-30in / 51-76cm<br>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      |

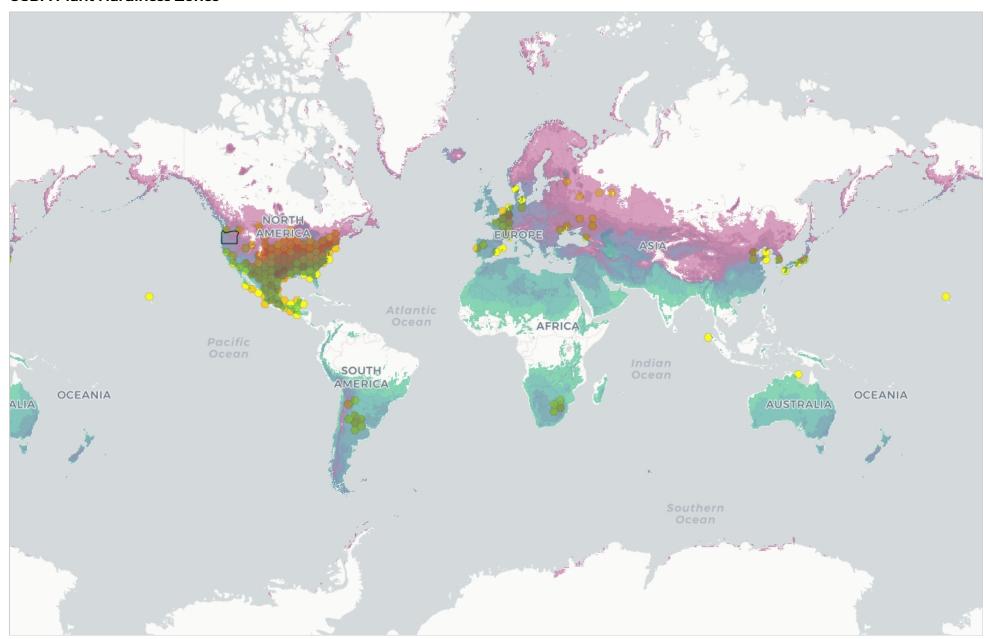
#### **PRE Combined**



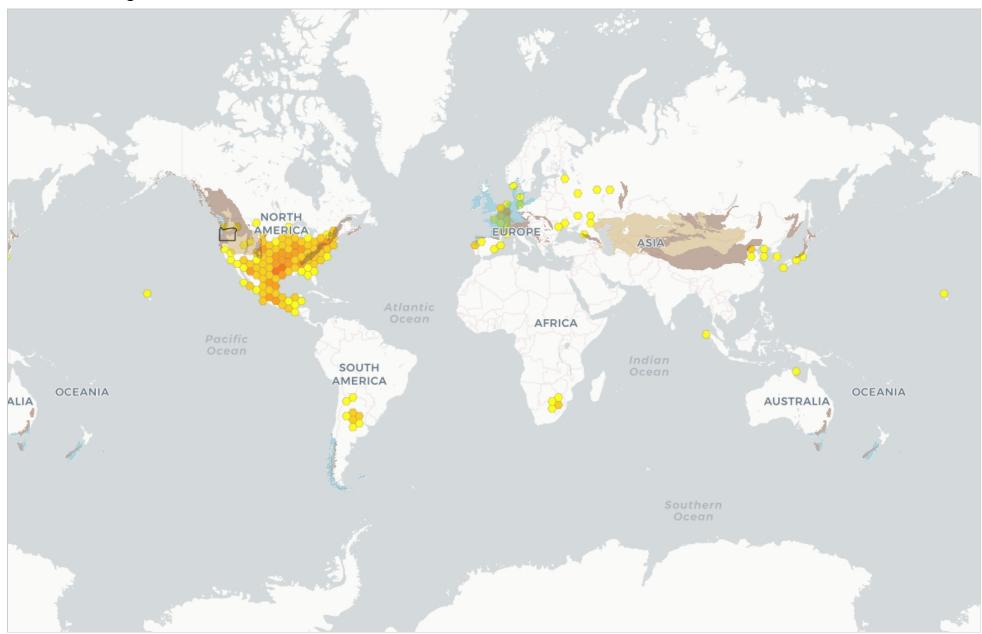
### **Precipitation**



#### **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 |           |                     |                           |
| Zone 7    | 30-40in / 76-102cm   | Temperate desert          |           |                     |                           |
| Zone 7    | 30-40in / 76-102cm   | Temperate mountain system |           |                     |                           |
| Zone 7    | 40-50in / 102-127cm  | Temperate desert          |           |                     |                           |
| Zone 7    | 40-50in / 102-127cm  | Temperate mountain system |           |                     |                           |
| Zone 7    | 50-60in / 127-152cm  | Temperate mountain system |           |                     |                           |
| Zone 7    | 60-70in / 152-178cm  | Temperate mountain system |           |                     |                           |
| 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  |           |                     |                           |
| Zone 8    | 60-70in / 152-178cm  | Temperate mountain system |           |                     |                           |
| Zone 8    | 60-70in / 152-178cm  | Temperate oceanic forest  |           |                     |                           |
| Zone 8    | 70-80in / 178-203cm  | Temperate mountain system |           |                     |                           |
| Zone 8    | 70-80in / 178-203cm  | Temperate oceanic forest  |           |                     |                           |
| Zone 8    | 80-90in / 203-229cm  | Temperate mountain system |           |                     |                           |
| Zone 8    | 80-90in / 203-229cm  | Temperate oceanic forest  |           |                     |                           |
| Zone 8    | 90-100in / 229-254cm | Temperate mountain system |           |                     |                           |