Brief Note: Spergularia Marina, A New Species Record for the Flora of Ohio

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SPERGULARIA MARINA, A NEW SPECIES RECORD FOR THE
FLORA OF OHIO

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A small population of S. marina occupying about 600 cm² was found growing in a single community at the Rittman marsh. The density of S. marina ranged from 5 to 15 plants per 100 cm² plot. Plants appeared to be making good growth and flowers were observed at different stages of development, with some containing capsules with mature seeds. Young S. marina seedlings, containing only cotyledonary leaves, were found growing below mature plants, apparently developing from this year’s seed crop. Other species of halophytes occurring with S. marina were Salicornia europaea L., Atriplex triangularis Willd., and Hordeum jubatum L.

Soils were saturated with water at the time of this collection and the water table was only 6 cm below the soil surface. The soil texture was a sandy loam containing 65% sand, 21% silt, and 14% clay. Water potential measurements taken at the soil surface average −1.07 MPa, and plant leaf water potentials averaged −2.4 MPa. The median soil pH was 5.6. Mean electrical conductivity measurements from a 1:1 soil-water extract was 18.2 mmho/cm, indicating a soil salinity level of 1.4% total salts. Data on soil and plant ionic content is presented in table 1.
TABLE 1
Plant and Soil Ionic Content.

<table>
<thead>
<tr>
<th>Sample No.</th>
<th>Ionic Concentration (mEq/l)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cl⁻</td>
</tr>
<tr>
<td>Soil</td>
<td>5</td>
</tr>
<tr>
<td>Roots</td>
<td>4</td>
</tr>
<tr>
<td>Stems</td>
<td>4</td>
</tr>
<tr>
<td>Leaves</td>
<td>4</td>
</tr>
</tbody>
</table>

*Chloride determination with Beckman specific ion electrode. Calcium and magnesium by atomic absorption and sodium and potassium by flame emission with a Perkin Elmer AAS model 360.

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LITERATURE CITED


