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Received 23 January 2002
Accepted 30 August 2004

Forked Three-awned Grass, *Aristida basiramea* Engelm. ex Vasey: A New Addition to the Flora of Quebec

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Brisson, Jacques. 2004. Forked Three-awned Grass, *Aristida basiramea* Engelm. ex Vasey: a new addition to the flora of Quebec. Canadian Field-Naturalist 118(2): 276-277.

A population of Forked Three-awned Grass (*Aristida basiramea* Engelm. ex Vasey; Poaceae) was found for the first time in Quebec, on a sand barren of the Cazaville region (Haut-Saint-Laurent). The only other region where this species is known in Canada is on the southern side of Georgian Bay in Ontario.

Key Words: *Aristida basiramea*, Forked Three-awned Grass, Poaceae, rare plants, Quebec

Une population d'*Aristida basiramea* Engelm. ex Vasey (Poaceae) fut trouvée pour la première fois au Québec, dans une lande sableuse de la région de Cazaville (Haut-Saint-Laurent). Le seul autre endroit où l'espèce est présente au Canada est sur le côté sud de la Baie Georgienne en Ontario.

Mots-clés : *Aristida basiramea*, Poaceae, plantes rares, Québec

In September 2001, during an ecological survey near Cazaville, in the Haut-Saint-Laurent region of southern Quebec, a population of Forked Three-awned Grass (*Aristida basiramea* Engelm. ex Vasey) was found in a dry, sandy grass-field. Other populations were later located in similar habitats nearby. This is the first time the species has been reported for Quebec. In Canada, *A. basiramea* is known from four extant naturally-occurring sites located in southern Ontario, three of which are in Simcoe County, and one in Muskoka County (Allen 2001). The extent of occurrence in Ontario only totals 16 hectares. There is also one adventive station in northwestern Ontario, at Rainy River (Allen 2001). A few other reports exist, such as one in Norfolk County in Ontario, and a few more in Manitoba. However, the locality of the Norfolk specimen may be the result of a labelling error (Reznicek 1984), while the reports from Manitoba are considered questionable due to the absence of existing specimens (Scoggan 1957; Allen 2001). Thus, the Cazaville area becomes the second area in Canada where the presence of the species is confirmed. The species is listed as rare in Ontario (Reznicek 1984) and is considered threatened in Canada (COSEWIC 2003). On the basis of the newly discovered population, *A. basiramea* should be added to the list of rare vascular plants likely to be designated threatened or vulnerable (Labrecque and Lavoie 2002).

The genus *Aristida* is represented by 250 to 300 species, 29 of which are native to North America north of Mexico (Flora of North America Editorial Committee 2003). *A. basiramea* is an annual plant from 30 to 60 cm high characterized by glumes of unequal length and 1-flowered spikelets terminated by three long awns, one in the middle with a twisted base and two shorter straight awns on each side. It is abundant on dry sterile or sandy soil in the midwestern states. At the northeastern periphery of its range in the United States, it forms disjunct populations on dry lands and along sandy roadsides, some populations of which appear to be adventive. The closest reports of *A. basiramea* south of the border with Québec were from Plattsburg, Clinton Co., New York (S. J. Smith, 25 July 1965, NYS); Columbia, northern Coos Co., New Hampshire (A. S. Pease, 17 September 1955, NEBC); and Avon, Franklin Co., Maine (A. Haines, 26 October 1990, MAINE). The species is recognized as rare in Maine, Iowa and Colorado (Allen 2001).

The Cazaville area (45°03' N, 74°22' W) is located in the Mixed Plain Ecozone of the St-Lawrence Lowland Ecoregion (Ecological Stratification Working Group 1995). The area is characterized by a vast sandy plain of littoral origin dating from the last post-glacial period. White Pine (*Pinus strobus*) forests were abundant before European settlement (Brisson and Bouchard 2003), but today, the area is occupied by sandy, grassy fields, sand barrens and secondary forests of Red Maple (*Acer rubrum*), Trembling Aspen (*Populus tremuloides*) and Gray Birch (*Betula populifolia*). *Aristida basiramea* was found on open, sandy grassfield with *Poa compressa*, *Danthonia spicata*, and various types of lichens. The sandy plain of Cazaville is host to other rare plant species. The northernmost colony of *Monarda punctata*, a species rare for Quebec and Canada, was recently found nearby (Boudreault and Brisson 1994). As well, *Hedeoma hispida*, considered rare for Quebec (Labrecque and Lavoie 2002), is also found on the sandy plain.

Specimens of *A. basiramea* were deposited at the Marie-Victorin Herbarium (MT: Brisson Number JB01-25).

Acknowledgments

I thank Stuart Hay (Marie-Victorin Herbarium) and Stephen Darbyshire (Agriculture and Agri-Food Canada), who reviewed the manuscript and provided useful information. I am also grateful to Richard Mitchell (Biological Survey, New York State Museum) and Ray Angelo (Harvard University Herbaria, New England Botanical Club) for kindly providing information on *A. basiramea* in the U. S.

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Received 30 November 2001
Accepted 21 June 2004