MICHIGAN STATE UNIVERSITY

Committee on Agriculture Michigan House of Representatives

October 3, 2023

Dear Members of the Committee:

Classifying milkweed as noxious will be detrimental to ecological systems, including to populations of endangered Monarch Butterflies. Therefore, I am writing in support of Michigan's HB4857. I am unable to attend in person to provide this testimony; I have provided testimony in writing here to be added to the record, and to be read aloud.

I am a community ecologist at Michigan State University with expertise in global change impacts on biodiversity. HB4857 correctly states that "(2) Noxious weeds does not include milkweed (any species of the genus *Asclepias*)." Milkweed is native to the region, and is the host plant for the Monarch Butterfly which relies on milkweed for food and egg-laying habitat. As of 2022, the migratory Monarch Butterfly (*Danaus plexippus plexippus*) has been classified by the International Union for the Conservation of Nature (IUCN) as "endangered" on its Red List, having been previously classified as "declining". The primary reasons for this status are habitat loss and climate change. Pesticides, herbicides, and native habitat conversion to agriculture and other land uses, have caused large declines in milkweed and the species that rely on it. In addition, climate change-induced drought can limit milkweed growth, and earlier Springs have caused Monarchs to migrate sooner than milkweed is available. Numerous studies document that these changes have compounded and led to Monarch Butterfly and milkweed declines.

Milkweed supports an entire food web and therefore increases biodiversity. In addition to the Monarch Butterfly, there are numerous insects that are primary consumers of milkweed nectar – bees, moths, flies, beetles, other butterflies – not to mention the birds, frogs, reptiles, mammals, fish, and predatory insects that prey upon milkweed's primary consumers. Milkweed is also essential to help maintain and restore ecosystem services like pollination, nutrient cycling, and carbon sequestration. Labeling milkweed as a noxious weed is not just incorrect scientifically, it is in direct conflict with its essential ecosystem functions that aid biodiversity and humans alike. To reach the recently adopted UN Convention on Biological Diversity Kunming-Montreal Global Biodiversity Framework targets, including protecting a minimum of 30% of Earth's terrestrial, freshwater, and marine areas by 2030 (also known as 30x30), we need to *especially* protect essential species including milkweed.

Sincerely,

Phoeter J. Male

Dr. Phoebe Lehmann Zarnetske Associate Professor of Spatial and Community Ecology, Department of Integrative Biology Director, Institute for Biodiversity, Ecology, Evolution, and Macrosystems (IBEEM) Michigan State University



Department of Integrative Biology

College of Natural Science Michigan State University

Natural Science Building 288 Farm Lane, Room 203 East Lansing, MI 48824-1115 517/355-4640 FAX: 517/432-2789 ibio@msu.edu https://ibio.natsci.msu.edu

MSU is an affirmative-action equal-opportunity institution.