

FIRST REPORT OF THE WESTERN WHEAT APHID, *Diuraphis tritici* (Gillette) IN INDIANA

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ABSTRACT: Samples of winged aphid were obtained during a survey of small grain aphids conducted in Indiana in 1988. These aphids were classified as western wheat aphids (WWA), *Diuraphis tritici* (Gillette). A comparison with *D. noxia* and the new distribution of the WWA in the U.S. are provided.

The Russian wheat aphid *Diuraphis noxia* (Mordvilko) (Figure 1), was first detected in Texas in March, 1986. Given the increased importance of this insect as a cereal pest since its introduction into the U.S., its dispersal across western and Great Plain states, and its potential threat for cereal producing areas of the Midwest, a survey of small grain aphids using yellow-pan water traps (Moericke) was conducted in 1988 in two locations, the Southeast Purdue Agricultural Center (SEPAC) near North Vernon, Jennings Co., and the Southwest Purdue Agricultural Center (SWPAC) near Vincennes, Knox Co. No RWAs were found in this survey. In late June, samples of winged aphid were obtained from both locations. Near the traps the wheat plants were carefully examined but no aphids were found, probably because they were too close to maturity. The samples were classified in the Dept. of Entomology, Purdue University, as western wheat aphids, *D. tritici* (Gillette), which had not been reported previously in Indiana. This species is morphologically similar to the Russian wheat aphid, particularly in that they both have small, globular cornicles, but *D. tritici* lacks the characteristic double cauda present in *D. noxia*. The western wheat aphid is currently distributed in the following states: Colorado, Illinois, Indiana, Minnesota, Montana, New Mexico, Oklahoma, South Dakota, Texas, Utah, Washington, and Wyoming (Figure 2).

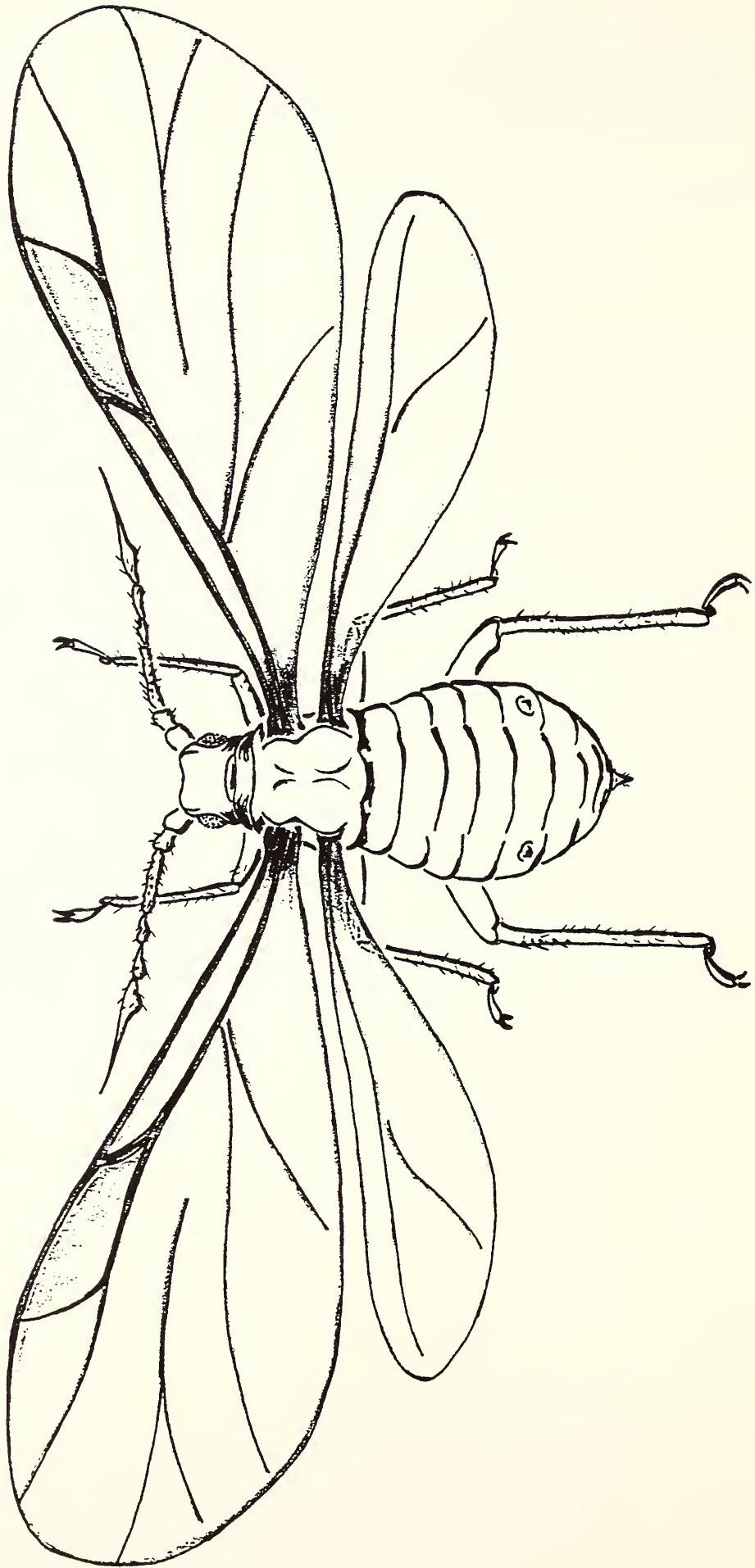


Figure 1. Winged form of the western wheat aphid.

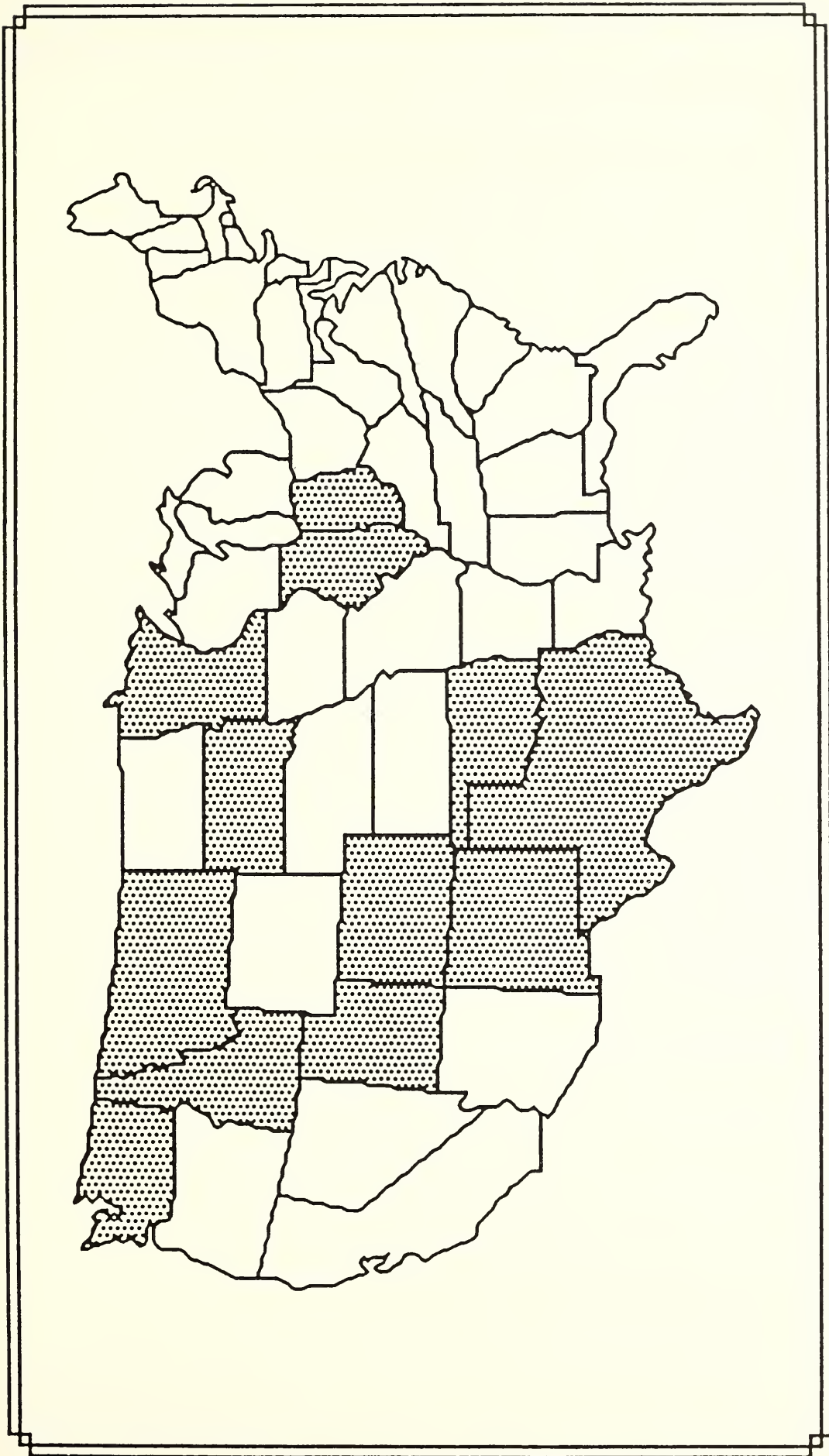


Figure 2. States with reported presence of the western wheat aphid.

