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## RECORDS OF *PACHYBRACHIS* IN ILLINOIS (COLEOPTERA: CHRYSOMELIDAE)<sup>1</sup>

Robert J. Barney<sup>2</sup>

### ABSTRACT

A list of the 20 species and subspecies of *Pachybrachis* contained in the collections of the Illinois Natural History Survey and Southern Illinois University, and the author's personal collection, is presented, with recorded ecological data and county distribution records where known.

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The last comprehensive treatment of the genus *Pachybrachis* was by Fall (1915). Balsbaugh (1973) and Balsbaugh and Tucker (1976) reviewed certain species groups, and Balsbaugh and Hays (1972) have recognized new synonymies, but much work remains to be done. Riley and Enns (1970) stated in their checklist of Missouri Chrysomelidae that "this is the largest and undoubtedly one of the most difficult North American chrysomelid genera with many of the species being quite indistinct."

The data presented are from specimens examined by the author in the Illinois Natural History Survey and Southern Illinois University collections, and the private collection of the author. This list records 20 species and subspecies of *Pachybrachis* collected in Illinois.

### Family CHRYSOMELIDAE Subfamily CRYPTOCEPHALINAE Genus PACHYBRACHIS Chevrolat

*atomarius* (Melsheimer) 1847. May to August. (Fig. 2). The Christian County specimens were collected from *Rhus glabra* L. and the Jersey County specimens from *Amorpha canescens* Pursh. Fall (1915) commented that *atomarius* varies from the extreme of being almost entirely black to examples where yellow is the predominant color.

*bivittatus* (Say) 1824. (Fig. 3). May to July. This species has been repeatedly collected by sweeping *Salix* spp.

*hepaticus* (Melsheimer) 1847. (Fig. 4). June through August.

*impurus* Suffrian 1853. (Fig. 5). May through July. This species was collected in native prairie habitat, principally hill prairies.

*luridus* (Fabricius) 1798. (Fig. 6). May through July. The Calhoun and Monroe County specimens were collected on *Ceanothus americanus* L. and the Mason County specimens on *Amorpha canescens* Pursh. This species was collected in native prairie habitat remnants.

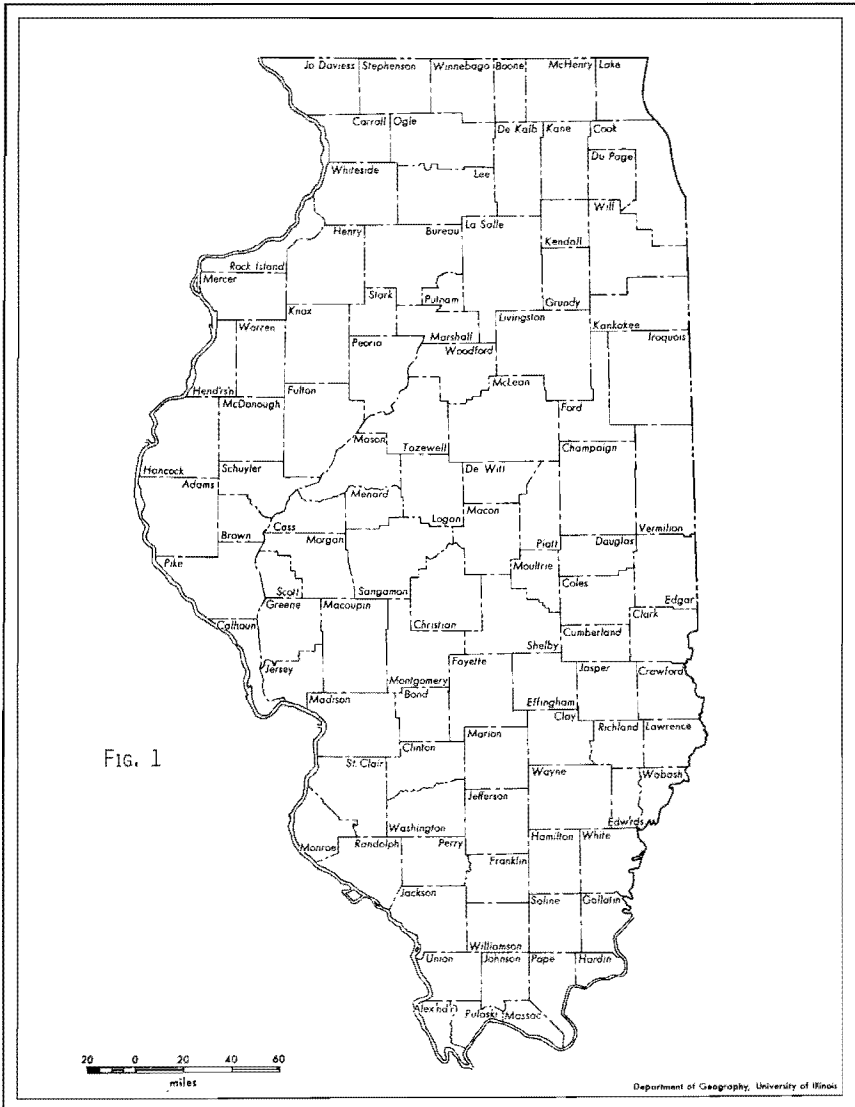
*m-nigrum* (Melsheimer) 1847. (Fig. 7). May to July.

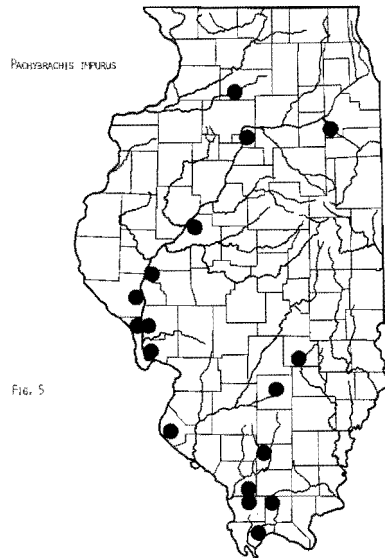
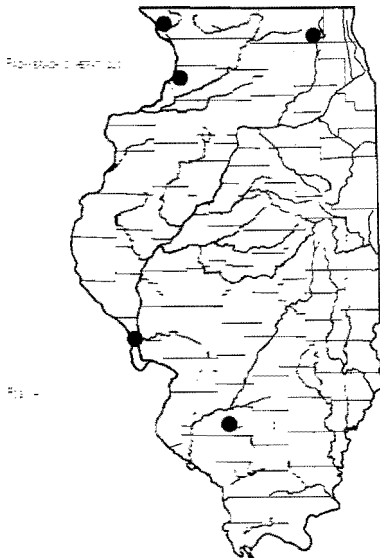
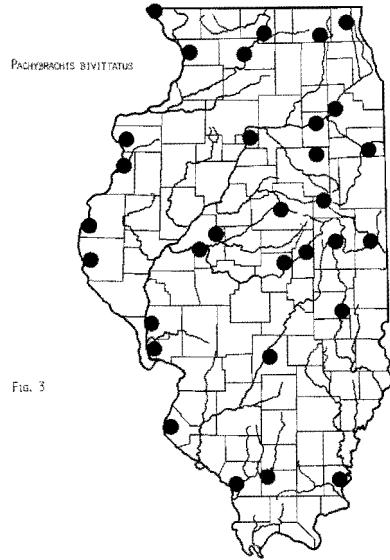
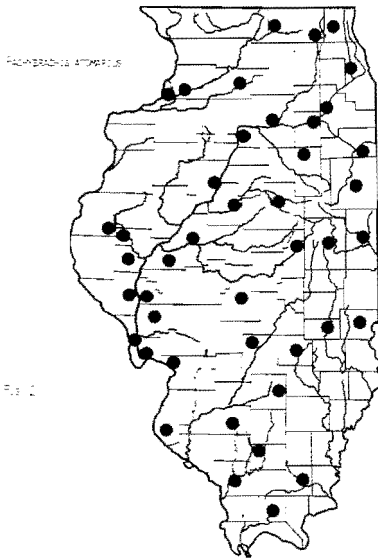
*nigricornis autolyceus* Fall 1915. (Fig. 8). May through July. A series of 48 specimens were collected on *Desmodium* in Monroe County. These Illinois records represent the

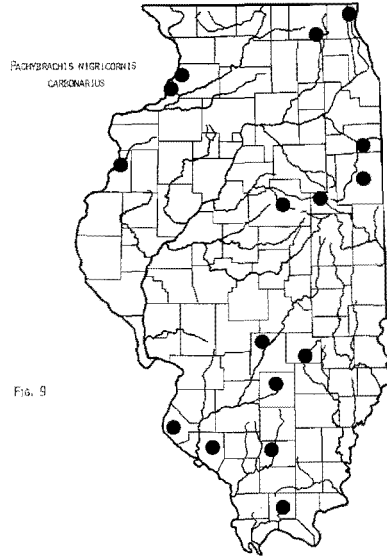
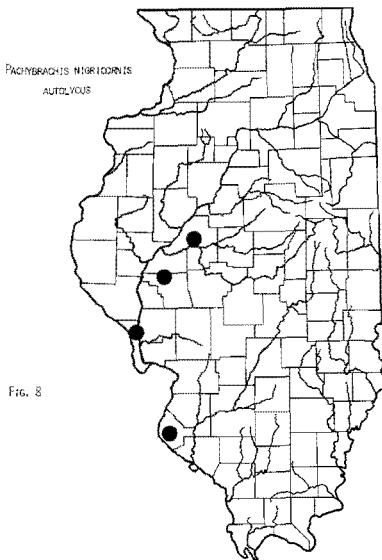
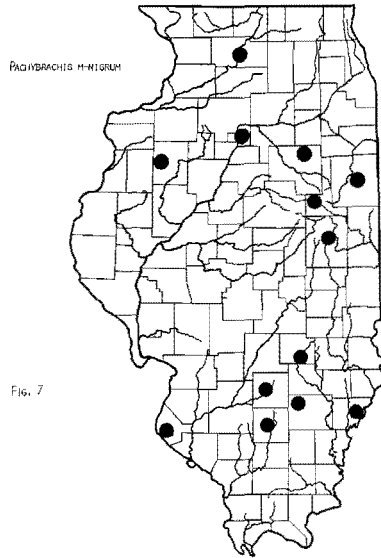
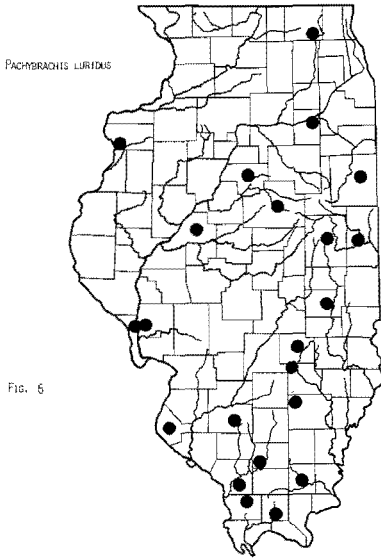
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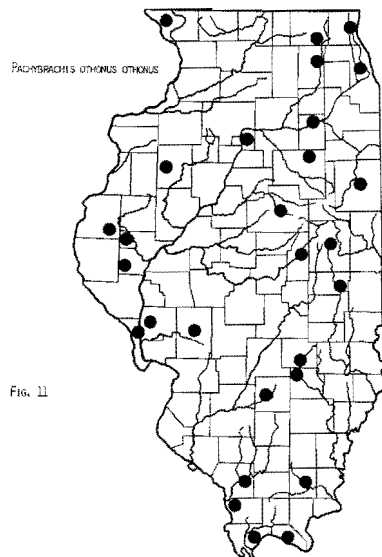
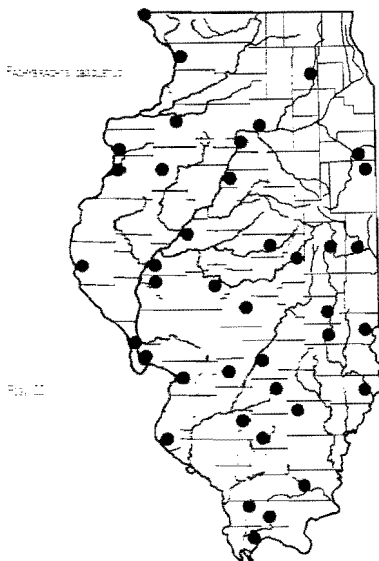
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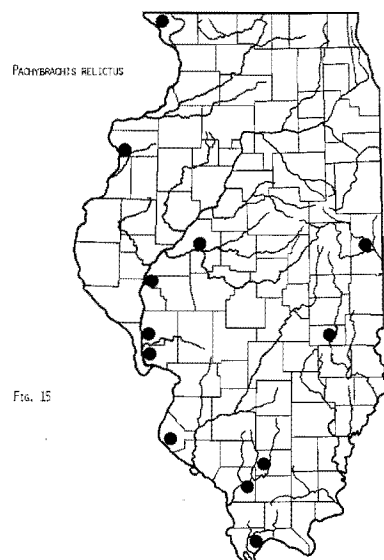
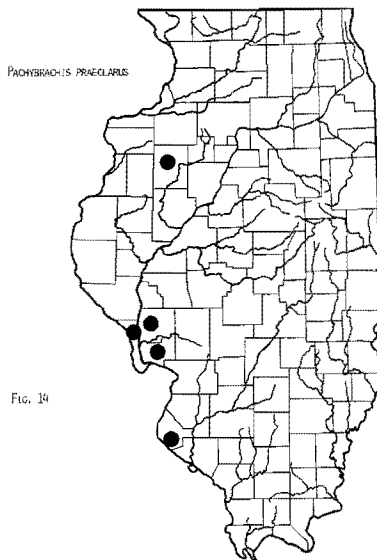
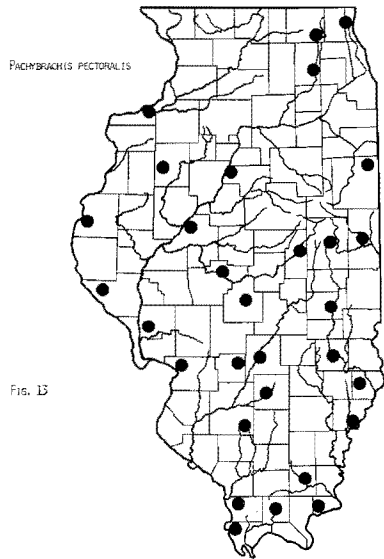
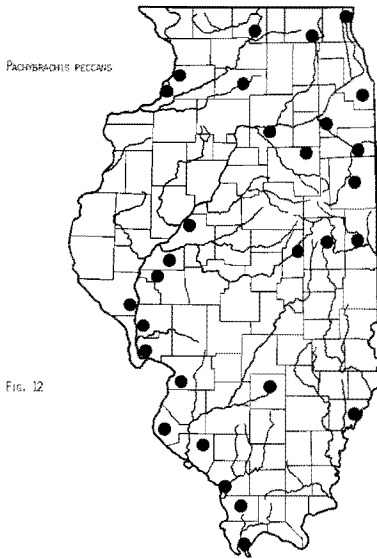


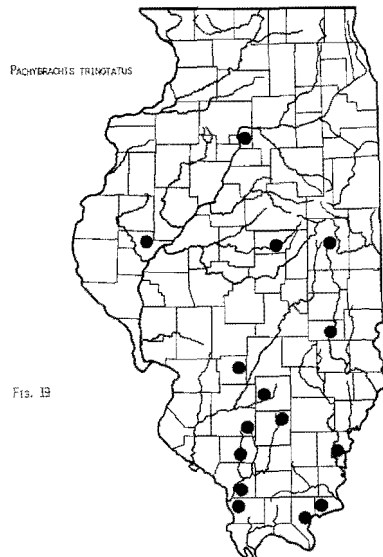
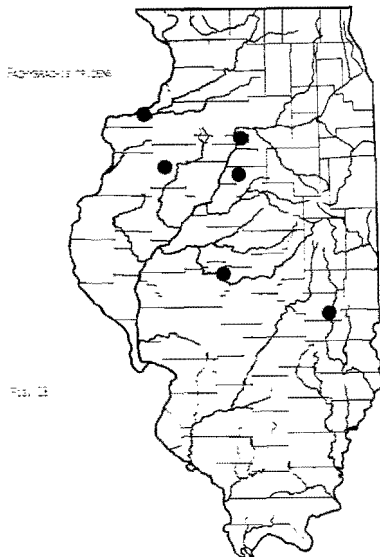
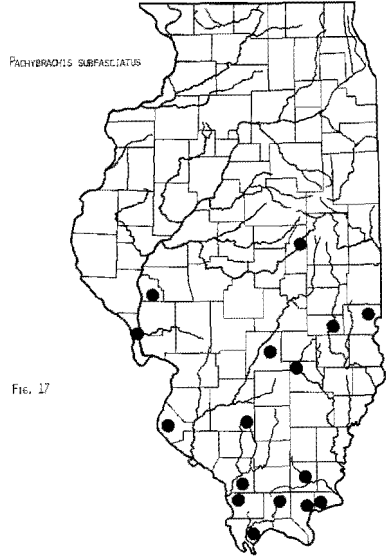
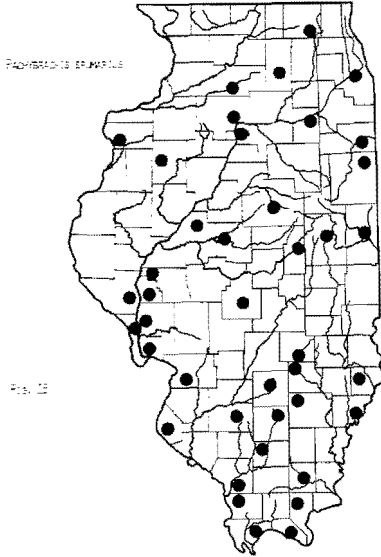




- eastern-most range of this subspecies in the United States, according to Balsbaugh and Tucker's (1976) taxonomic revision. These specimens were all collected on hill prairies which possess the dry habitat that Balsbaugh and Tucker reported *autolytus* prefers.
- nigricornis carbonarius* (Haldeman) 1849. (Fig. 9). May to July. Some of the Calhoun County specimens were collected on *Amorpha canescens* Pursh., and some of the Marion County specimens were taken from *Desmodium* sp.
- obsoletus* Suffrian 1853. (Fig. 10). May through August. The Bond, Champaign, Fayette, Kane, and Kankakee County specimens were collected on *Salix* spp.
- othonus othonus* (Say) 1825. (Fig. 11). May to August. Three McHenry County specimens were taken from *Petalostemum purpureum* (Vent.) Rydb.
- peccans* Suffrian 1853. (Fig. 12). April to September. This species has been repeatedly collected from *Salix* spp. When discussing *peccans*, Fall (1915) stated that "... it approaches so closely to *diversus* and *abdominalis* in some of its paler forms as to make distinction purely discretionary." I have collected from a single willow tree a series of specimens that exhibit the range of dark to light coloration referred to above.
- pectoralis* Melsheimer 1847. (Fig. 13). May through September. The Alexander, Coles, and Madison County specimens were collected on *Robinia pseudoacacia* L., the Christian County specimen on *Rhus glabra* L., the Jasper County specimen on *Corylus americana* Walt., some of the Lawrence, Marshall, and Vermilion County specimens on *Quercus* spp., and some of the Marion and Piatt County specimens on *Glenditsia* spp.
- praeclarus* (Weise) 1913. (Fig. 14). May to July. The specimens were all collected in native hill prairie habitats.
- pubescens* (Olivier) 1808. One specimen was taken in Greene County, 23 May 1950.
- relictus* Fall 1915. (Fig. 15). May through August. The Cumberland County specimen was collected on *Hypericum prolificum* L. This species is found in native prairie remnants.
- spunarius* Suffrian 1853. (Fig. 16). April to September. The Christian, Franklin, and Greene County specimens were collected from *Rhus glabra* L. The Lawrence County specimens were from *Quercus alba* L. and the Mason County specimen from *Quercus marilandica* Muench.









*subfasciatus* LeConte 1824. (Fig. 17). April to June. This species has been collected only from the southern half of the state.

*tridens* (Melsheimer) 1847. (Fig. 18). June and July. The Coles and Sangamon County specimens were collected from *Carya* spp.

*trinotatus* (Melsheimer) 1847. June to August. (Fig. 19).

*turbidus* LeConte 1880. One specimen was collected in Monroe County, 17 June 1981.

The author collected this specimen on a hill prairie of the Mississippi River. This may be the eastern-most record of this species in the United States.

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#### LITERATURE CITED

- Balsbaugh, E. U., Jr. 1973. Geographical variation in *Pachybrachis othonus* (Coleoptera: Chrysomelidae) with a description of a new species. *Ann. Entomol. Soc. Amer.* 66:252-261.
- Balsbaugh, E. U., Jr., and K. L. Hays. 1972. The leaf beetles of Alabama (Coleoptera: Chrysomelidae). *Alabama Agric. Exp. Sta. Bull.* No. 441:1-223.
- Balsbaugh, E. U., Jr., and W. L. Tucker. 1976. Geographical variation in *Pachybrachis nigricornis* (Coleoptera: Chrysomelidae). *Coleopt. Bull.* 30:117-131.
- Fall, H. C. 1915. A revision of the North American species of *Pachybrachis*. *Trans. Amer. Entomol. Soc.* 41:291-486.
- Riley, E. G., and W. R. Enns. 1979. An annotated checklist of Missouri leaf beetles (Coleoptera: Chrysomelidae). *Trans. Missouri Acad. Sci.* 13:53-83.