## AN APPARENT SIZE DIFFERENCE BETWEEN NORTHERN UNITED STATES AND TEXAS SPECIMENS OF MACROMIA PACIFICA HAG. (ANISOPTERA: MACROMIIDAE)

During the past five years I have collected and measured $14 \circ$ and $3 \%$ adult specimens pertaining to this species. All were collected in McLennan Co., Texas, from the South Bosque River and Hog Creek. E.B. WILLIAMSON (1909, Proc. U.S. natn. Mus. 37: 369-398, pls. 35-36) published measurements of pacifica based on $25 \delta^{\circ}$ and $7 \%$ specimens, most of these from Indiana, save for 10 and 18 from Waco, Texas, $1 \%$ from Milwaukee, Wisconsin, $1 \%$ and $1 \%$ from Mahomet, lllinois, and 10 from Kappa, Illinois. His measurements (abdomen incl. app.: of 48.553.0 mm , mean 50.9 ; $\% 46.5-53.5 \mathrm{~mm}$, mean 50.6 ; - hind wing: $841.5-48.0 \mathrm{~mm}$, mean 45.3 ; $\% 44.5-49.5 \mathrm{~mm}$, mean 47.3), given for the entire material, without distinction between localities, indicate that pacifica is approximately the size of $M$. annulata Hag. and $M$. georgina (Sel.). My specimens, however, are notably smaller than those species and Williamson's specimens of M. pacifica.

Mrs. L.K. Gloyd (Ann Arbor, Michigan) most kindly sent to me the measurements of the pacifica specimens in the E.B. Williamson Collection, University of Michigan, Ann Arbor, Michigan. All of these are from Bluffton and the Wabash River, Wells Co., Indiana, except for 18 from Murray Co., Oklahoma. They are shown in Table I along with my McLennan material.

On the basis of this evidence it is apparent that the size of the specimens of $M$. pacifica

Table I - Comparative measurements of adult from Indiana, Oklahoma and Texas

| Material | Length (in mm), range (mean) <br> Total <br> (incl.app. |  |  |
| :--- | :---: | :---: | :---: |
|  | Abdomen Hind wing app.) |  |  |

tends to decrease in the North-South direction.
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