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CONTRIBUTIONS TO THE KNOWLEDGE OF NORTH AMERICAN ARCTIIDÆ.—IV.*

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Arctia proxima, Guérin.—To obtain a feasible knowledge of the extent and direction of variability in this species, extensive material was procured by recrossing original broods and again their inbred progenies.

Some of the freshly-formed pupæ thus obtained were either subjected to treatment by excessive cold (-12° C. for two to three hours repeatedly), or kept at a temperature of about $+4^{\circ}$ C. for thirty days, while others were exposed to $+38^{\circ}$ C. for 100 hours. Gravid females were obtained from Morelos, Mex; Los Angeles, Cal., and several more through the kindness of Dr. R. E. Kunzć, who took them at Phoenix, Ariz. The female from Morelos deposited only a limited number of eggs by October 26th, which hatched November 5th, producing the form *proxima*, Guérin, in December: The eggs from Los Angeles were obtained the latter part of April, the imagoes appeared the beginning of June, all the males being of the form *autholea*, Bdv.

The eggs of two females taken by Dr. Kunzć at electric light, commenced to hatch October 18th. The larvæ were fed during winter on *Cichorium endivia* and *Lactuca sativa*, var. *Romana* (Cos lettuce), this diet being varied sometimes by winter-spinach. The rearing of the progenies had, of course, to be accomplished at the regular temperature of a dwelling room.

The larvæ grew rapidly; November 16th the first pupæ were obtained, all others finishing their larval state by December 1st; the majority of moths appeared from December 3rd to 15th.

Three successive inbred generations were then reared. Another gravid female taken at Phoenix, April 18th, arrived at New York April 24th; the eggs hatched April 28th, and the final metamorphosis took place from June 4th to 15th.

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