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REPRODUCTIVE DEVELOPMENT OF LABORATORY-REARED AND FIELD COLLECTED PLUM CURCULIO (COLEOPTERA: CURCULIONIDAE)

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Laboratory-reared southern and field-collected northern strain plum curculio, *Conotrachelus nenuphar* (Herbst), were sampled to examine the relationship between growing degree days and female reproductive development. Adult beetles were dissected to measure mating status, maximum oocyte size and number of oocytes. Southern strain beetles initiated mating 10 days after eclosion at 25ºC and did not require mating to induce oocyte development. Northern strain females mated after overwintering; an estimated 95% of the population mated after 142 degree days (base 10ºC). Southern and northern strain beetles had a stable maximum oocyte length of 62 and 72 mm, respectively. Oocyte size is as less biased measure of reproductive development than either the proportion of mated females, or the number of retained oocytes. Rapid assessment of field-caught female reproductive status could assist in determining the damage potential of the plum curculio population and inform management decisions relating to their control.