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Description of the developmental stages of *Dalbulus maidis* (DeLong) (Hemiptera: Cicadellidae) Disease vector in maize

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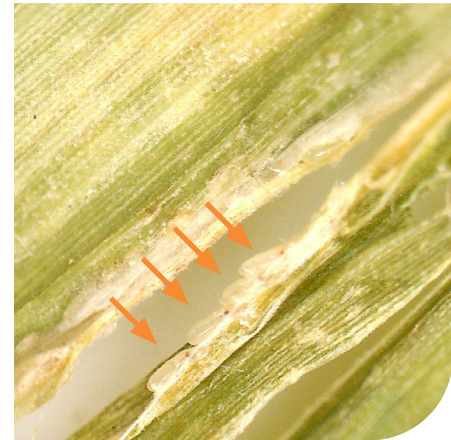
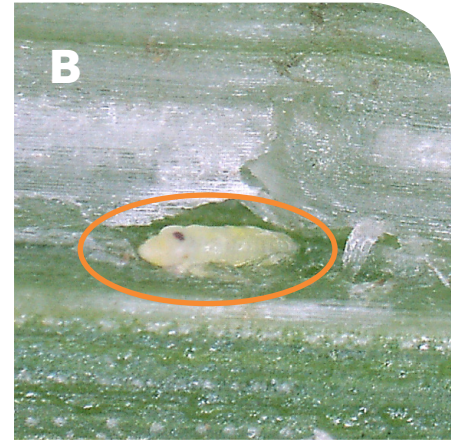
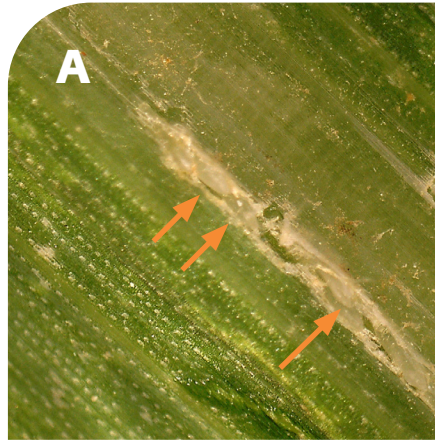
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EGG



The female lays around 132 eggs during her lifetime, depositing 4-19 eggs, one by one, in rows of 8 eggs (**Fig. A**) (Cuadra and Maes, 1990).

The egg is very small and has an oval shape (**Fig. B**). A newly laid egg is colorless and turns white one week later.



NYMPH I

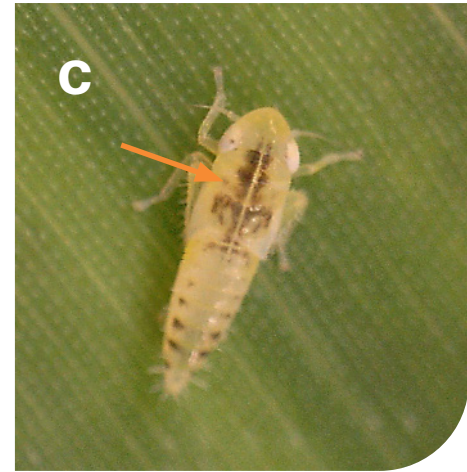
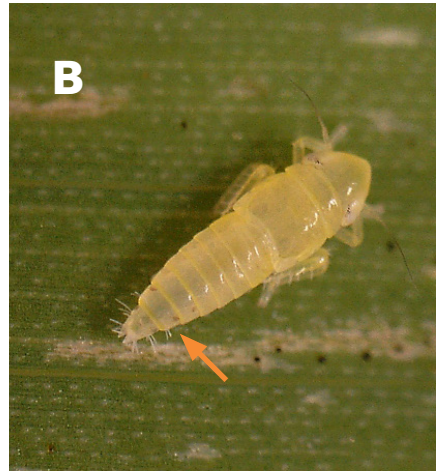
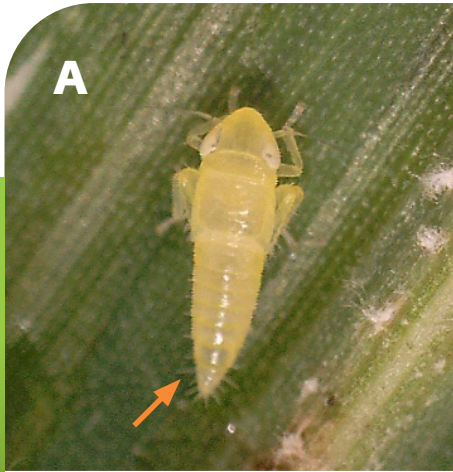




At this stage, the nymph reaches 1.06 mm in length. It is hyaline and has red-colored eyes, a feature that disappears as it grows into the next stage.

NYMPH II

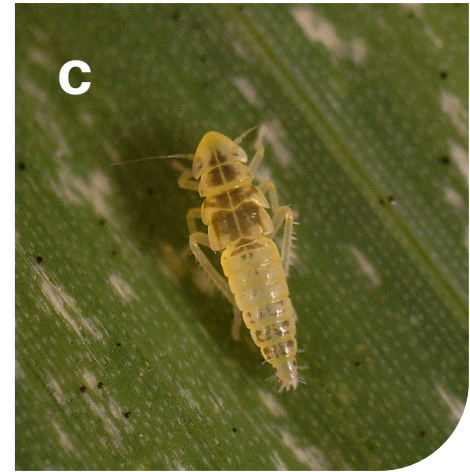
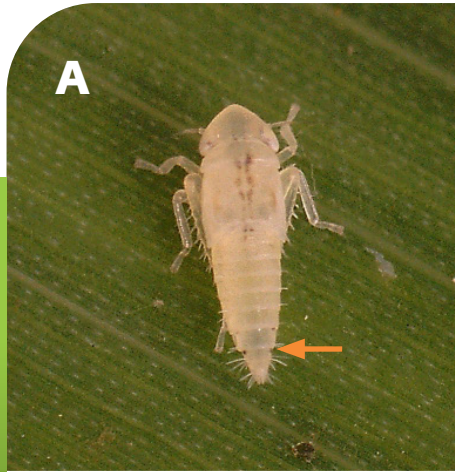




Nymphs at this stage are approximately 1.58-2.12 mm in length. They are cream colored and their setae become more visible (**Fig. A**). Some nymphs show dark spots starting at the seventh abdominal segment (**Fig. B**). Dark spots are also seen in other parts of the body (**Fig. C**).

NYMPH III

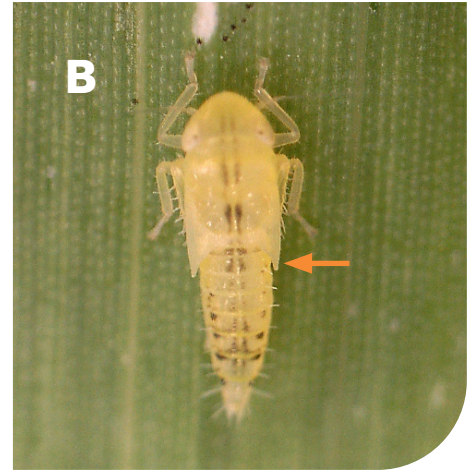
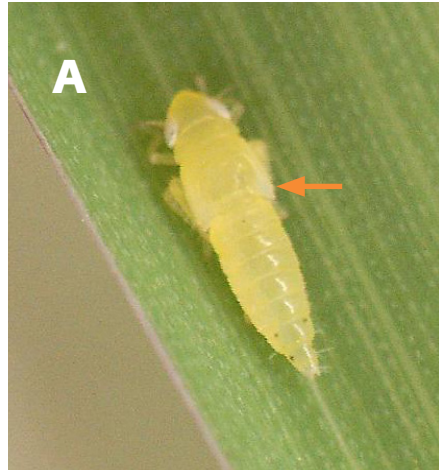




Length at this stage is approximately 2.37 mm. They are cream colored and show spots at the eighth abdominal segment (**Fig. A**). The intensity of spots increases across the whole body (**Fig. B, C**).

NYMPH IV





At this stage, the nymph is 2.87–2.95 mm in length. Traces of wings become evident at the first and second abdominal segment (**Fig. A**). Wings expand towards the edge of the third abdominal segment (**Fig. B**).

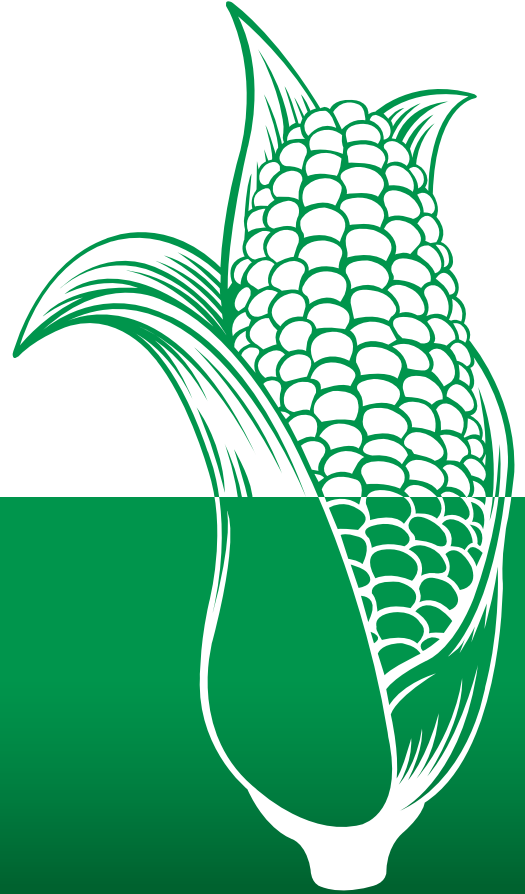
NYMPH V

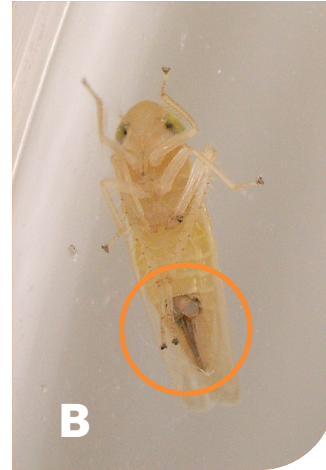
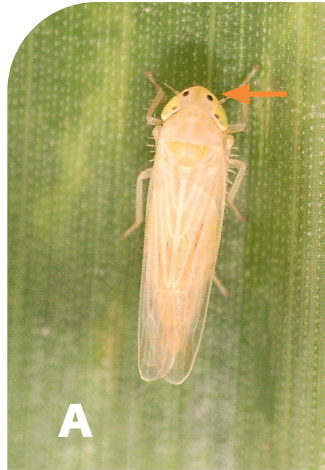




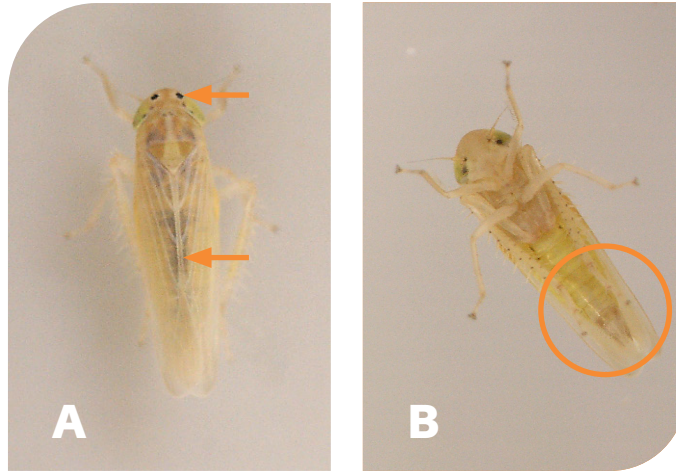
Nymph is approximately 3.43–3.50 mm in length. Wings expand to the fourth abdominal segment.

ADULTS





The female is around 4.9 mm in length; it is cream colored and shows two characteristic dark spots on the head (**Fig. A**). The reproductive system (ovipositor) is visible to the naked eye, as it is darker in color (**Fig. B**).



The male is cream colored and 4.5 mm in length. Similar to the female, it shows two characteristic dark spots on the head (**Fig. A**). Dark spots may be seen across the body (**Fig. A**). The reproductive system is not visible to the naked eye (**Fig. B**).

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Cuadra P; Maes J. (1990). Problemas asociados al muestreo de *Dalbulus maidis* (DeLong & Wolcott) en maíz en Nicaragua. *Revista Nicaragüense de Entomología* 13:29-55.

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