



Figure 8: Proposed model for the processing of miR319c in melon. **A**, The miR319c precursor is first partially cleaved in the 5' arm, DCL1 then continues to cut the precursor four more times in a loop-to-base direction, until the mature miR319c is finally released. Alternative #miR319c/miRNA* duplex is unstable under this processing conditions. **B**, In cold-exposed plants the first partial cleavage is impaired promoting lower accuracy in the next four DCL1 mediated cuts (mainly cut 4). As consequence of this altered precursor processing, stable miR319c/miRNA* is inefficiently released and/or accumulated. In contrast, accumulation of alternative #miR319c is increased.