Last week I had a call from a vegetable grower who thought they might have Allium leaf miner (LM) pretty bad in their onion field. While this grower was organic (synthetic pesticide use reduces Allium LM risk) and in the northern part of Maryland I was skeptical about Allium LM being a really bad problem in onions. As I approached the onion field it did look like the pictures I have seen of Allium LM damage in Pennsylvania. The onions were broken and falling over one another and there were white marks on the onion stems (fig. 1), just like what has been seen in PA (fig. 2). Upon closer inspection, the white marks on the onion stems were too large and scattered on a stem (fig. 3) to be the marks made by female Allium LM flies that are smaller and generally in a more orderly row usually near the tip of an onion leaf (fig. 4). Although hard to tell from figure 3, all the marks on the onions from the Maryland field were on one side of a leaf and all of the onion plants were leaning in one direction. This looked like hail damage. The grower was skeptical as they did not see any hail fall over the last 2 weeks and there was no other damage from hail on the farm. The white marks on the onion stems were most likely made by hail that was probably smaller than a pea. We had had reports of hail on June 2 in areas in northern Maryland, but the reports were very scattered and the hail was usually very light if it did fall.

A few days after this visit another grower brought me onion stems that looked odd and they were afraid it was some disease. The damage appeared suddenly in the past few days (June 4-6) and only the onions at one end of the field had the problem. Figure 5 shows the onion stems with the damage. As on the other farm it was white marks on only one side of the stem and not the other. Figure 6 shows the same stems as in fig 5 but flipped over—no white marks. This grower was less skeptical that this was hail damage as they had heard some hail on their metal barn roof, but they really saw very little on the ground. The thunderstorms we had last week and in May produced some very small hail pellets that resulted in very isolated damage. To be sure, I had the onions tested from both farms for any disease—none were found. Other than possibly feeding the onions a low level of nutrient solution to help the recovery process there is not much else that can be done for the damage.
Fig. 2 Onions infested with Allium leaf miner

Fig. 3 Damaged onion stems with scattered white marks caused by hail

Fig. 4 The generally orderly white dots caused by female Allium LM
Fig. 5 Onion stems with white marks on one side

Fig. 6 Same onion stems turned over showing no white marks