

Vine weevil (Part two)

By Peter Lynch

How to recover the plants.....Nil desperandum

The weevil larvae may have destroyed your plants, but really you are looking at a handful of fresh new seedlings and not the detritus of a former favourite plant. Seize the opportunity to split and grow on. Enjoy the problem and take a positive attitude toward the challenge.

Kill the adult weevil on sight, without exception.

Vine weevils are all female, and all egg layers, delivering maybe 200 growing larvae into your plant environment. When you see an adult, kill it or expect two hundred larvae. Other than that, the effort to kill the adults, unless you are running a nursery, is probably not worth the effort, or the danger to the environment and maybe yourself, from the chemicals you would be using. Sometimes you get advice to go outside in the dark and tap the bushes over newspaper and the adults fall out, good luck, by then I am too tired to bother with them and looking for black insects in the dark seems arduous.

What are the signs that an adult is about?

Well, if the plant has notches on the leaves that is the usual sign. The variety of plants is quite wide (see Vine Weevil part one), but the notches look like this:



During daylight you would be lucky to find an adult on the Bergenia, Primula or Heuchera in the example above, and strangely the larvae prefer the roots of Primula and Heuchera, but don't bother so much with the Bergenia. Again, I don't recall seeing an adult, or even adult damage on a sedum, but these plants are loved by the larvae. The main point is to observe that you have damage from the adult and think of the two hundred larvae near by. Some plants, like Heuchera are doubly cursed, with adults loving the leaves, and larvae munching the roots.

Concentrate on the larvae

The larvae eat the roots, small larvae eating small roots maybe 8 inches deep in the soil, large larvae eating larger roots just under the ground, directly under the plant. If you see one larva, you have twenty, so keep digging and looking. They stay close to the food source, the roots.



Above you can see a fine crop of larvae in a jam jar lid, and on the right a larva sitting under the centre of the root ball of a primula as I hold the plant upside down. Unless you are prepared to dig the plant out and entirely wash the soil off you will not see the large ones as they sit right under the centre of the plant at the nexus of the main roots.

When you do wash them off the damage is most disheartening, and you are tempted to throw the plants away, don't, the weevil has just divided your plants for you. You have been given lemons, now we are going to make lemonade. If you look at the photographs below you can see what a healthy root formation for a young candelabra primula looks like. The first picture is of the entire plant. The second photograph is of the root ball. You see how each separate root strand ends in a forest of fine feeding roots. In the second photograph I have turned the photograph upside down so you can concentrate on the roots themselves. This is a beautiful pristine root ball, perfect.



The two photographs below show the damage from the feeding larvae. Small larvae eat the fine roots, alpha larvae eat the anchor and master roots, cutting off the entire ball below the surface. The plant tries to produce leaves, wilts, you water it, and it dies anyway. Without roots there is no way for the leaves to stay lush. These photos below were taken in February, as I acted on a hunch after a very mild winter and sure enough the larvae were all overwintered and fat as butter bears.

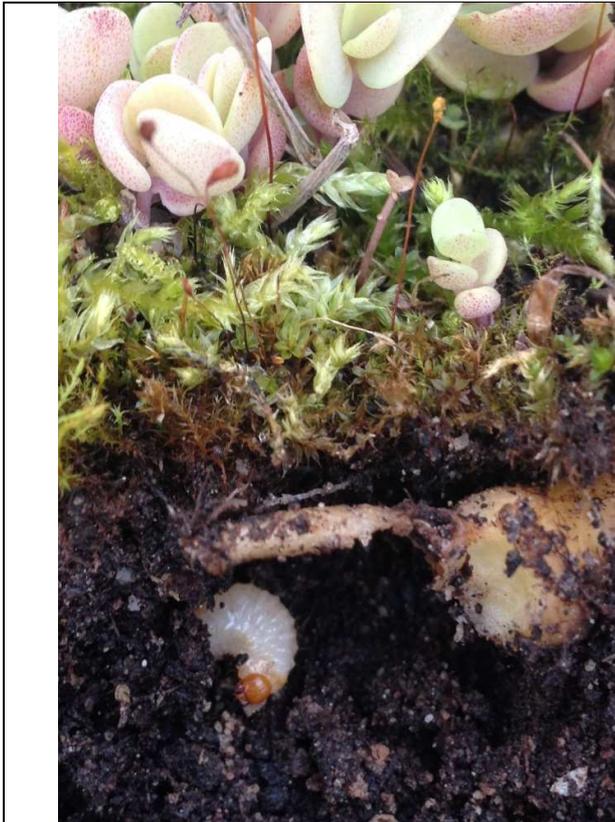


With the Primula family the larvae prefer candelabra with the root system you see above, rather than Primula Secundiflora and the root system you see below. Chewed and unchewed. I think the larvae go after big roots as they develop and the secundiflora is too much work if there is an alternative.



With Heuchera, the first you usually know of it, if you haven't seen the notches, is the top of the plant breaks off and rolls away like tumble weed. If you see the adult damage on a Heuchera in the ground, dig the plant up immediately, wash off all the soil and put it aside in a pot for treatment.

However let's try to save the plants. For this example I will use a Sedum , Sedum Herbsfreude. This potted plant was not thriving, though well watered. I took it out of the pot, and lo and behold, there is the monster lurking right under the neck of the plant, where you can't get it unless you wash off all the soil. You can see the mandibles on the very healthy larvae, but where is the root ball?



On the left you see a sedum from a pot, with the resident larva. To the right of the larva is the main root of the plant, heavily gnawed, and the photo below shows the disintegration of the plant when the soil is washed off.



At this point many people bin the plant, but really all that has happened is that you now have ten small plants. The photo below shows what little we have to work with, but just pot them up anyway.



The best way to think of them is as seedlings, after all, if we had seedlings like this we would be pretty confident that all of them will thrive when potted on.

So, pot each piece up in a 9cm square (or whatever is handy for you), don't water for a couple of days, then put them in a tray in shade under the bench for a week or two so they can find their feet. After that treat as seedlings, no direct sun for a month, but a bright environment.

While sedums are particularly hardy and easy to recover, the same result has been achieved with heucheras, and various primula.

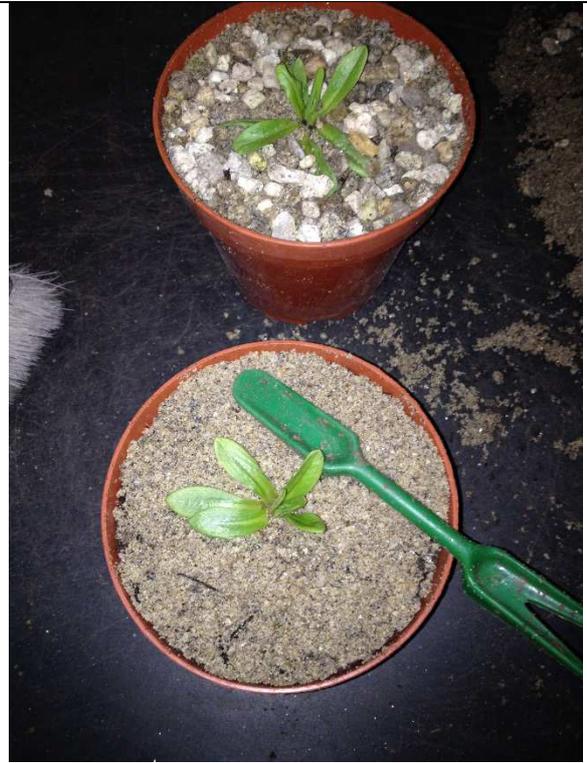
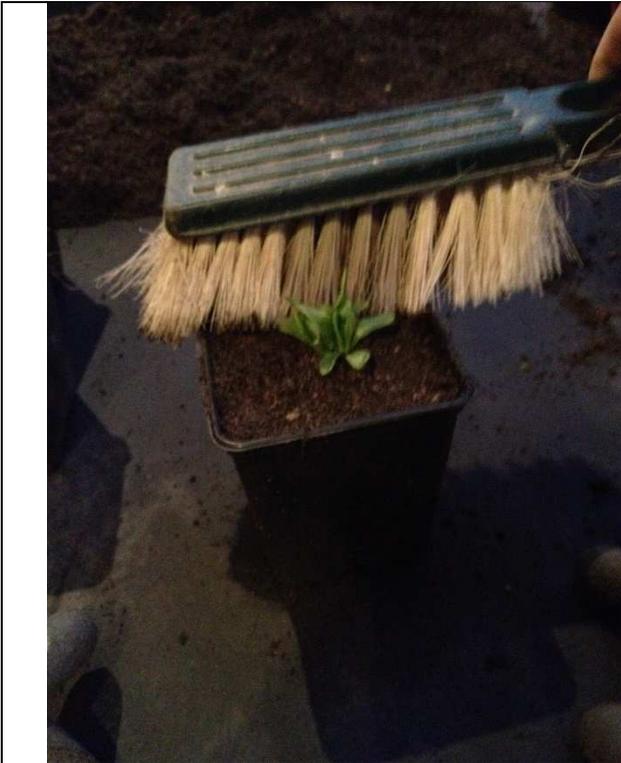
Here are the little sedum pieces after potting, and five weeks later. They should have been rotated, but I forgot about them as I put them under the bench, they'll straighten up. The key point is, they are alive and well.



A month after that, ie: two months after potting up the scraps you can see very healthy little sedums. The other photograph on the right is one of the Primula that had lost all its roots, five weeks later it had grown a very healthy new set of fresh roots and is well on the way to full recovery.



I plant the recovering plants in a soil based compound, and avoid the multi purpose type of medium. The larvae and the weevils don't enjoy that soil compound as much, and I cover the plant pots in sand, and then grit. Apparently the weevils have a very sensitive egg laying pipe and really dislike the scratchy stuff.



At the appropriate time, dose the potted up plants with nematodes, while they are sitting in a watering tray, then you can recycle the water with the nematodes that flow through the pots. Water the pots the day before so the soil is already wet. I plan to dose with nematodes two or maybe three times a year, while the soil is at the correct temperature and **WHILE THE LARVAE ARE PRESENT**. If you dose while the population is mainly adults you are wasting your time and money.

So you should be able to save your plants and get a new population of what you could regard as seedlings or cuttings, don't be worried about potting them up they have a great will to live and will come back from almost nowhere to become full plants. Lets also remember that there are great friends in the garden too, like this bunch of little fellas.



All the best.

Peter

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