The range of activity for the pea leaf weevil (PLW) has expanded significantly in the past five years, with it now up into the central Alberta and northern Alberta areas. Pressure has also expanded into southern Saskatchewan with larvae being found in the Parkland region.

Spring weather conditions have a very large impact on the timing and severity of PLW damage. When warm conditions (+17°C) persist for more than a few days in late April or early May, the PLWs arrive in fields early. The early arrival corresponds with the potential for higher yield loss. In years where cool weather persists, the arrival of the PLW can be much later and the resulting yield impact appears to be lower, especially when the crop has advanced past the 6 node stage before the PWL’s arrival.

Research has shown that seed treatments are much more effective at reducing losses from PLWs than foliar treatments. This is because most of the damage is done by the larva feeding on the nitrogen fixing nodules on the roots, rather than the adults feeding on the leaves. It is key to protect your plants up to the 6 node stage, since this is the most critical time in the plant’s development. The threshold is three out of 10 plants with a bite mark in the clam leaf.

Any area that is not green in the image on the right is an area of concern. At Bayer, we know that the PLW will be overwintering in tree lines, shelterbelts and ditches; and that springtime conditions could alter the above map drastically for the spring of 2019.

If you walk into a field and see PLW adults feeding and you have not used an insecticide seed treatment, then it is too late. At this point, nothing can be done to gain back the yield lost from the nitrogen fixing nodules.

Stress Shield® insecticide seed treatment (also part of Trilex® EverGo® SHIELD) can protect pea or faba bean plants for 4–6 weeks from pea leaf weevil feeding. The length of protection depends on how fast the plants are growing, the biomass of the plants and the rate the insecticide was applied.

For more information on this topic, contact Beth Markert, SeedGrowth Specialist – Southern Alberta, 403-625-7027, @BCSBethM