# DAFM Plant Pest Factsheet

## *Lixus juncii*
## Beet weevil/lixus

Fig 1: Adult *Lixus juncii* boring a “notch” into a beet petiole

## Pest Characteristics

- **Pest:** *Lixus juncii*
- **Common name(s):** The beet weevil or beet lixus
- **Hosts:** *Lixus juncii* is a pest of sugar beet (*Beta vulgaris* subsp *vulgaris*) crops in Europe. However, it is also known to infest several other plants including safflower (*Carthamus tinctorius*), *Chenopodium spp.* and sea beet (*Beta vulgaris* subsp *maritima*).
- **Invasive Risk:** *Lixus juncii* has been observed spreading further northward in Europe in recent years. Should the pest manage to enter and establish in Ireland it may pose a threat to the ~10,000 ha of sugar and fodder beet produced annually.
- **Entry Pathways:** Imports of beet commodities are considered to be the most likely entry pathway for introducing the pest. However, to date no interceptions of the pest have been recorded.
- **Impact:** The pest poses an increasing problem to beet production in southern Europe. Population control of the pest in Italy has been difficult since the prohibition of neonicotinoid seed coating in 2019. In France *L. juncii* appears to be spreading further inland and northward in recent years with infestations causing an estimated 5-7% crop loss in certain areas.
- **Visual Symptoms:** Early signs of infestation can surveyed for using traps for catching flying adults that emerge in the spring (Fig 2). Symptoms of infestation on plants are holes (notches) on petioles which result in plant wilt. Larvae feed by boring galleries into the taproot impacting plant health.


Fig 2: Monitoring traps for f *Lixus juncii* (a); notches in beet petiole (b); larval galleries in taproot (c)

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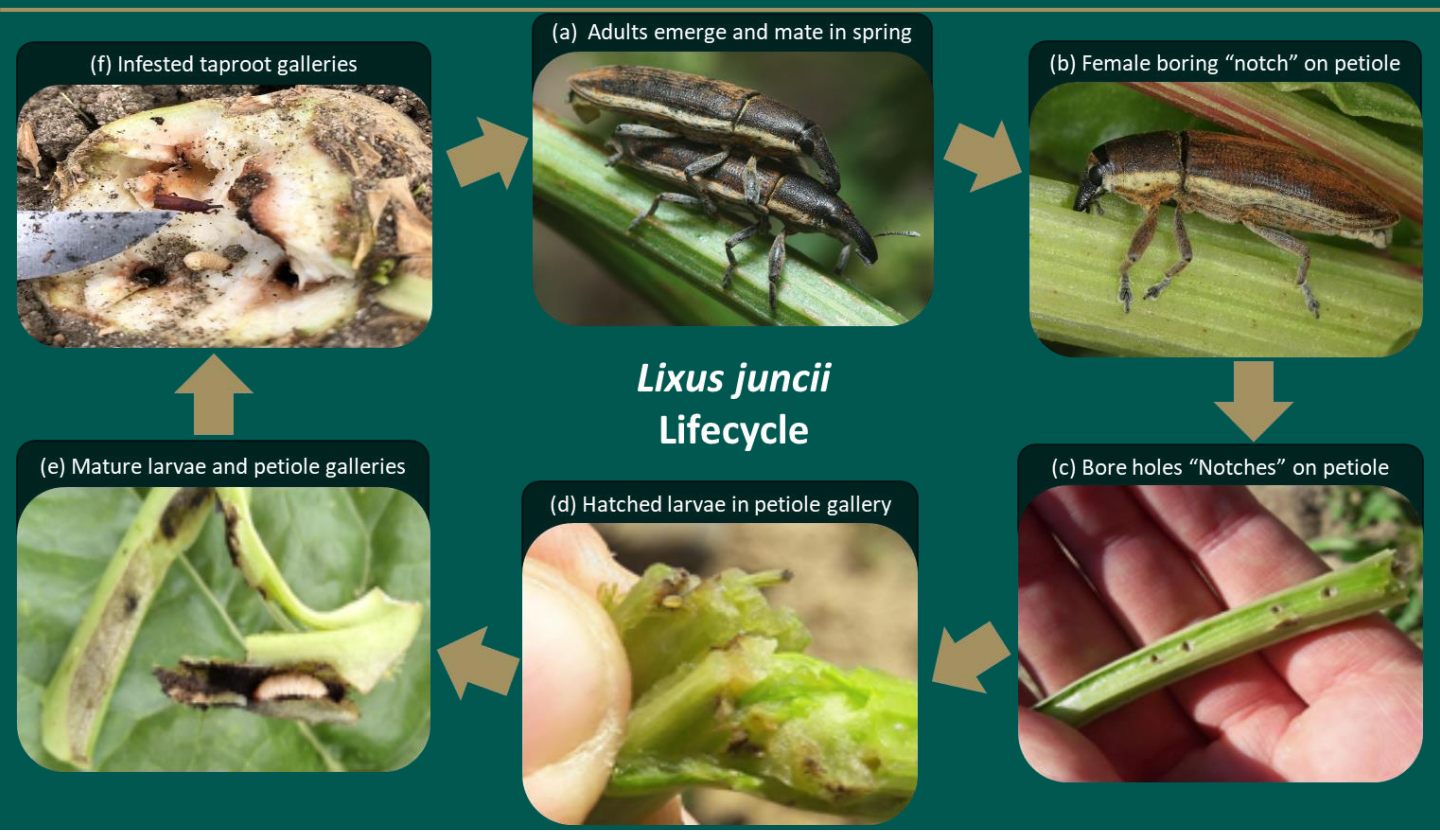


- **Dispersal:** Adults are strong flyers and spread once they emerge from over-wintering in the soil in the spring.
- **Distribution:** *Lixus juncii* is native to the areas around the Mediterranean basin. It is currently present in Africa, Asia and Europe countries (Fig 3).
- **Adaptability:** It is unknown how suited to the Irish climate this pest would be. It is appears to favour coastal areas with mild winters.
- **Lifecycle:** Adults (10-15 mm in length) over winter in soil and emerge in the spring capable of flight. Adults mate in the spring and females seek out host plants and bore “notches” in plant petioles in which they lay their eggs ~ 30 per petiole. Eggs hatch in about 2 weeks and larvae bore down the petiole into the taproot, forming feeding galleries for about 30-40 days. Larvae then metamorphosise in the tap root into a pupal stage which last about 14 days after which adults emerge and seek over wintering sites. Only one generation is produced per year.
- **If suspected:** If you find a suspected specimen please submit images to DAFM at: plantpestreport@agriculture.gov.ie

**Photo credits:** Lifecyle (a), (b) © H. Bouyon; Fig 1, Fig 2, Lifecycle (c), (d), (e), (f) © Institute Technique de la Betterave

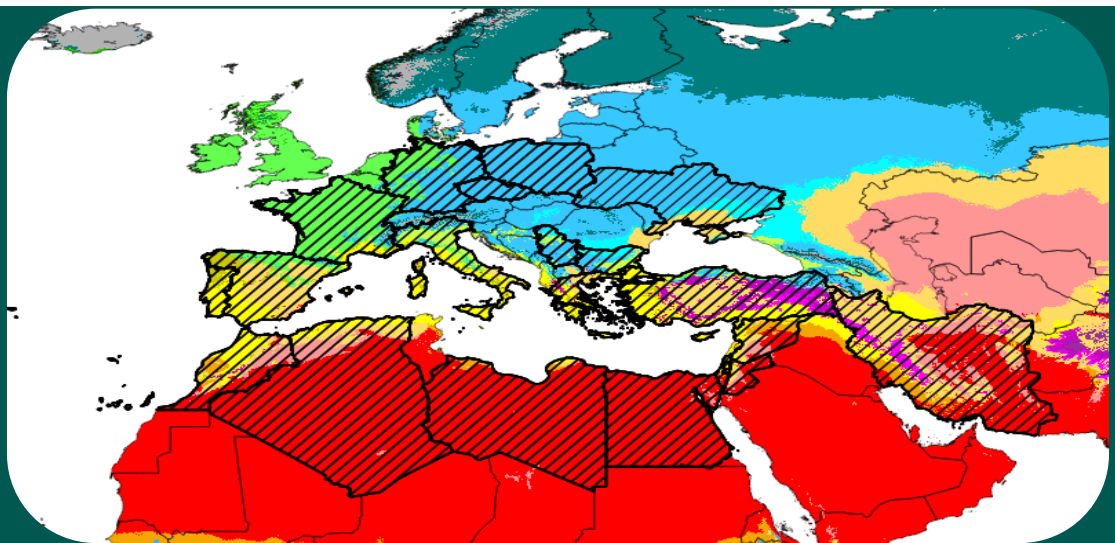

Fig 3: Known global distribution of *L. juncii* (cross hatched areas) overlaid on climate classifications of regions

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