Leptinotarsa decemlineata

Common names: Colorado beetle (English) Doryphore de la pomme de terre (French) Kartoffelkäfer (German) Escarabajo de la patata (Spanish) Koloradskii kartofel'nyi zhuk (Russian)

Kingdom:	Animalia
Phylum:	Arthropoda
Class:	Insecta
Order:	Coleoptera
Suborder:	Polyphaga
Family:	Chrysomelidae

GEOGRAPHICAL DISTRIBUTION

EPPO region: Following its introduction from the USA to Bordeaux, France, in 1922, the beetle spread rapidly throughout the region despite intensive control operations to contain it. L. decemlineata is present in Austria (first reported in 1941), Belarus, Belgium (1935), Bulgaria (1958), Czech Republic, Estonia, France, Germany (1936), Greece (1963), Hungary (1947), Italy, Latvia, Libya, Lithuania, Luxembourg (1936), Moldova, Netherlands (1937), Poland (1946), Portugal (1943), Romania, Russia (European, Siberia, Far East), Slovakia, Spain (1935), Switzerland (1937), Turkey, Ukraine, Yugoslavia. It has been reported from but is not established in Denmark, Finland, Norway (1948), Sweden and the UK (1901) (including the islands of Guernsey and Jersey (1939), Thomas & Wood (1980)).

Africa: Libya.

Asia: Armenia, Azerbaijan, Georgia, Iran, Kazakhstan, Kyrgyzstan, Russia (Siberia, Far East), Tajikistan, Turkey, Turkmenistan, Uzbekistan.

North America: Canada (British Columbia to eastern provinces); Mexico, USA (widespread; probably originated in western USA it was first collected from wild Solanaceae at what is now the border between Nebraska and Iowa in 1811; it had reached the Atlantic coast by 1874).

Central America and Caribbean: Costa Rica (found in the past but not established), Cuba, Guatemala.

EU: Present.

DETECTION AND IDENTIFICATION

Symptoms Both adults and larvae eat the foliage, eventually stripping all leaves from the haulm; exceptionally, the tubers are also eaten. Characteristic, black and rather sticky excrement is left on the stem and leaves by all stages. Morphology Eggs Yellow or light-orange, long-oval, about 1.2 mm long, and found in rows on the underside of potato leaves. Larva Has a large abdomen and arched body; 1st instar is cherry-red with glistening black head and feet; later instars become progressively carrot-red, then pale-orange, with a line of several small black dots on each side of the body marking the spiracles. Adult A stout, oval, strongly convex and hard-backed beetle, about 1 x 0.6 cm; yellowish-brown except for five narrow black stripes on each of the two creamy-yellow wing covers; about a dozen small black spots on the top of the head and thorax; the tips of the legs are darkbrown or black. Detection and inspection methods Because of their size and distinctive coloration, adults and larvae are not difficult to observe by visual inspection. L. decemlineata has a tendency to release its hold on plants that are shaken and this characteristic can be used to detect insects hidden among foliage. Visual sampling of potato fields was found to be as efficient for estimating population density as the whole-plant bag-sampling method, and more efficient than sweep netting (Senanayake & Holliday, 1988). For area surveys, soil sampling at harvest for buried beetles in diapause gives reliable results (Glez, 1983).[i]

[i] http://www.eppo.int/QUARANTINE/insects/Leptinotarsa_decemlineata/LPTNDE_ds.pdf