

## **The biology and non-chemical control of Common Fiddleneck (*Amsinckia micrantha* Suksd.)**

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### **Common fiddleneck**

(coast fiddleneck, Menzies fiddleneck, small-flowered fiddleneck, tarweed)

### ***Amsinckia micrantha* Suksd.**

(*A. calycina*, *A. intermedia*, *A. menziesii*)

### **Occurrence**

Common fiddleneck is an introduced annual frequent in eastern England especially East Anglia (Stace, 1997). It is a casual that appears to be increasing in occurrence. The plant has the appearance of a yellow-flowered bugloss. It occurs sporadically as a birdseed alien and is recorded on tips (Hanson & Mason, 1985). Common fiddleneck is native to North America where it occurs on roadsides, neglected fields and poor grade pasture. It flourishes in disturbed areas (Ray & Chisaki, 1957a). It was first cultivated in the UK in 1836 (Anon, 2005). It was recorded in the wild in 1910 when it appears to have been a seed impurity. In East Anglia it was first noted early in the 20<sup>th</sup> century in old chicken runs (Salisbury, 1961). It was also recorded from waste ground in southern England. Common fiddleneck is now a local weed in Bedfordshire and elsewhere but is more widely distributed in eastern Suffolk as a cornfield weed. In a survey of arable weeds 1971-1973, it was recorded in arable situations and roadsides but was found in less than 2% of the areas surveyed (Chancellor, 1977). In a study monitoring the arable field margins in the Breckland area of East Anglia 1989-1996 (ADAS, 1997), common fiddleneck was one of the most frequent species in one of the study areas and was seen to increase significantly in the first 4 years of monitoring. In a comparison of the relationship between vegetation and site factors in uncropped wildlife strips in the Breckland, common fiddleneck was considered an indicator species of disturbance and low summer moisture on the light soils (Critchley, 1994).

The related introduced annual, scarce fiddleneck (*A. lycopsoides*), was reported to be found growing in cereals and around flour mills in Lincolnshire in 1908 but was thought not to ripen seeds (Woodruffe-Peacock, 1908). It has become naturalised in a few places and is becoming more frequent on sandy soils in eastern England (Stace, 1997).

### **Biology**

Common fiddleneck is found in flower from May to July and flowering may continue into October. The flowers are self-fertile and self-pollinated but do not appear to be apomictic (Ray & Chisaki, 1957b). It produces 4 seeds per flower loosely enclosed in the expanded bristly calyx. The flower spike is compact initially but elongates as the flowers develop and becomes crosier-like, hence the name fiddleneck. The lower flowers ripen first and the hard black seeds loosen and fall out when mature. There is no obvious dispersal mechanism.

### **Persistence and Spread**

Common fiddleneck seed has been introduced to new areas as a contaminant in sandy soil brought in from elsewhere. Where this has occurred, seedling emergence has continued intermittently for several years. The seeds, still enclosed in their bristly calyx, are often dispersed on the fur of animals.

### **Management**

No information has been found specifically on the control of common fiddleneck in the UK. It should therefore be managed as any other annual weed would be by shallow cultivation to kill emerged seedlings and prevent seeding.

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