



## Policy

### St John's wort (*Hypericum perforatum*)

#### Background

St John's wort (*Hypericum perforatum*) was introduced from Europe as a garden ornamental and medicinal herb in the 1850s. It has become locally naturalised in this State in the areas where it was formerly cultivated.

St John's wort causes photo-sensitisation and lowered condition in stock when grazed in large quantities (Campbell & Delfosse, 1984); in the eastern States and overseas it has formed dense stands which replace more useful rangeland species. It was first noticed as a weed in this State in 1904, at the time when it was becoming abundant in Victorian forests which were ill-advisedly used as rangeland. For these reasons, it was proclaimed a noxious weed in 1911, and was retained on schedule three under the *Weeds Act, 1956-1959*. It was deleted under the *Pest Plants Act, 1975* until 1982 when it was again proclaimed for part of the State. This was continued under the former Animal and Plant Control Act until the schedules were reviewed in 1990.

#### Discussion

At present, St John's wort is scattered in the high rainfall habitats of the Mt. Lofty Ranges, Kangaroo Island, South-east and Eyre Peninsula, but has shown no range increase in the last 45 years. It requires an annual rainfall of over 500mm to survive (Campbell, 1977), and in the winter rainfall regime of this State it forms scattered open populations rather than the dense stands seen at high altitudes in the eastern States. The infestations occur on roadsides, degraded forest, and neglected pasture; the species is of no significance as a weed of agriculture.

Seeds are dispersed over long distances by stock, and on machinery or vehicles; the disjunct and stabilised distribution indicates that St John's wort has reached its ecological limits in South Australia. It cannot germinate in soils containing more than a trace of lime (Kloot, pers. comm.), and so is excluded from the majority of the State. At the seedling stage it is not an effective competitor: it cannot invade arable land or vigorous pasture (in which it is selectively grazed by stock). On rangeland or neglected pasture where it has become established it can be controlled by fallowing and establishing a dense perennial pasture (Moore & Cashmore, 1942).

Biological control using *Chrysolina* beetles has reduced dense stands of St John's wort in Victoria (Shepherd, 1983); these insects had less impact in this State as the weed was never sufficiently abundant for them to build up large populations.

St John's wort does not meet the criteria for scheduling as a proclaimed plant as it shows no potential to increase its range, is not an aggressive competitor and is easily controlled.

### **Co-ordinated Control Program**

None proposed.

### **Declaration**

St John's wort is not declared, and no sections of the *Natural Resources Management Act, 2004* apply to it.

### **References**

Campbell, M.H. (1977) Assessing the area and distribution of serrated tussock (*Nasella trichotoma*), St John's wort (*Hypericum perforatum* var. *angustifolium*) and sifton bush (*Cassinia arcuata*) in New South Wales. N.S.W. Dept. Agric. Tech. Bull. 18.

Campbell, M.H. & Delfosse, E.S. (1984) The Biology of Australian Weeds 13. *Hypericum perforatum* L. J. Aust. Inst. Agric. Sci. 50: 63-73.

Moore, R.M. & Cashmore, A.B. (1942) The control of St. John's wort (*Hypericum perforatum* L. var. *angustifolium* DC) by competing pasture plants. C.S.I.R.O. Bulletin 151.

Shepherd, R.C.H. (1983) Distribution and abundance of St John's wort, *Hypericum perforatum* L., and its introduced biological control agents in Victoria. Australian Weeds 2: 144-155.