

## *Echium plantagineum*

### **Common name:**

Patersons Curse, Salvation Jane,  
Murrumbidgee bluebell,

### **Palatability to Livestock:**

Moderate at flowering.

### **Toxicity to Goats:**

Moderate risk.

### **Toxicity to Other Species:**

Horses, pigs, cattle, and in excess to sheep.

### **Poisonous Principle:**

Pyrrolizidine alkaloids.  
Echiumine and echimidine alkaloids.

### **Effects:**

#### *Signs and symptoms;*

- . Loss of condition and depression.
- . Acute jaundice,
- . Photosensitisation.
- . Colic and staggers.

#### *Health and Production Problems;*

- . Chronic ingestion may lead to liver, gall bladder and spleen damage.
- . May accumulate excess copper, which can kill the animal.
- . Convalescence takes time.

#### *Treatment;*

- . None.

### **Integrated Control Strategy:**

- . Use goats to prevent seeding.
- . Cultivate, spot spray with glyphosate, or 2,4-D at the rosette stage of growth in autumn and spring.
- . Biological control agents are being tested. Try a combination of these, herbicides and cultivation, but do not kill the “bugs”.
- . Declared “Noxious” in most states.

### **Comments:**

- . Sheep in general are tolerant of this weed.
- . Adult goats graze the flowers first, preventing seeding.

. If there is sufficient alternate fodder, and copper/cobalt/molybdenon salt licks, goats will demolish this weed, preventing the biennial growth and flowering.

. For sheep and goats it can be a useful fodder plant, but toxicity varies between areas, and years.

. There are two growth stages, rosette, and flowering stages; forms rosettes, with broad oval leaves, later forming a stem.

. An erect annual, or biennial herb, up to a metre high, with a high seeding rate, seeds can live for up to 7 years.

. Seeds can germinate at any time, and may stay dormant in the soil for up to 5 years.

. Several stems rise from a rosette, covered with hairs; it has a long deep red taproot.

. Leaves are alternate, hairy and long.

. Purple flowers in spring and early summer.

. All plants die after flowering, in summer.

. In horses, a loss of condition, appetite and circling, known as “Walkabout Disease”

. Used by beekeepers as a source of pollen and nectar.

. Called “Salvation Jane” in SA.



Picture: *Echium plantagineum*

Weeds of the Hunter and Central Coast.

### **Further Reading:**

- . Blood. Environmental Weeds for SE Australia. CRC Weed Management Systems. 2003
- . Cunningham, Mulham, Millthorpe and Leigh, Plants of Western NSW. 1999
- . Huggins and Lucy. Weeds of Southern Qld. 1997
- . Kohnke. Feeding and Nutrition of Horses. 1998
- . McBarron. Poisonous Plants, Handbook. 1983
- . Parsons and Cuthbertson. Noxious Weeds of Australia. 2001
- . Wilson. Some Plants are Poisonous. 1997