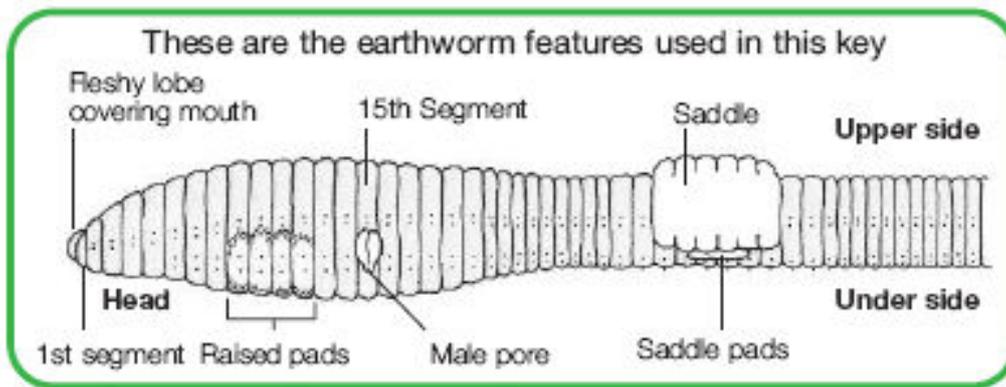


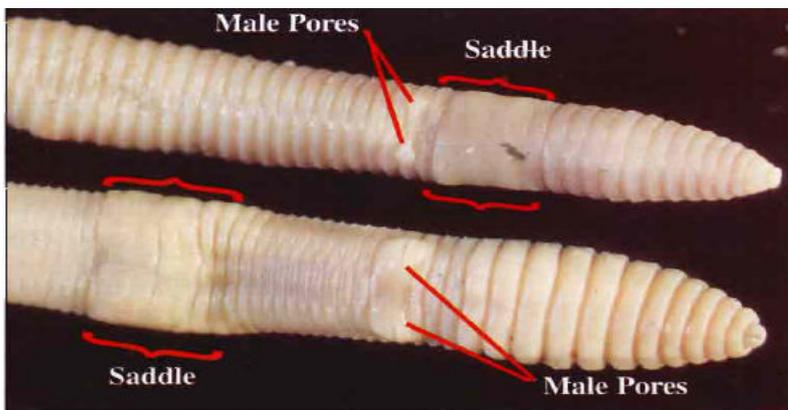
COMMON INTRODUCED Paddock Earthworms – IDENTIFICATION GUIDE



Always use a mature specimen.

The presence of a “saddle” indicates that you have a mature specimen

Native or Introduced Earthworm?



Underside of native (above) and introduced (below) earthworms

1. Natives have paired male pores (raised, pale lumps) just **behind the saddle**, introduced species have the pores **in front of the saddle**.
2. Native earthworms feel rough because they have lots of short bristles, or setae, evenly spread around their body. Introduced species have fewer setae, groups in pairs (up to four pairs) on each segment.

WHAT IS THE LENGTH AND THICKNESS OF THE RELAXED WORM?

THE YELLOW-TAIL WORM *Octolasion cyaneum*

LENGTH: 80 to 180mm **DIAMETER:** 5.0 to 8.0mm **SADDLE:** Segments 29 to 34

MARKINGS: yellow pigment on tail (4 segments), and sometimes before saddle



The yellow-tail worm

Octolasion cyaneum

Status: Common in higher rainfall (>750mm) pastures, never abundant

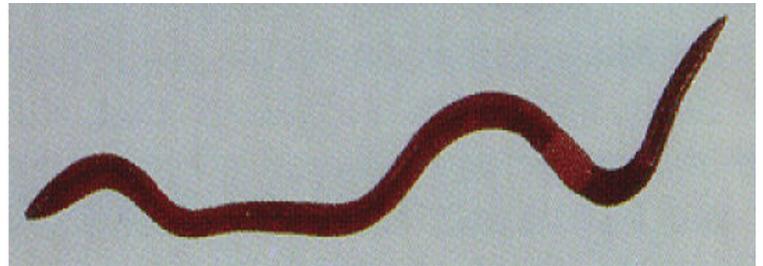
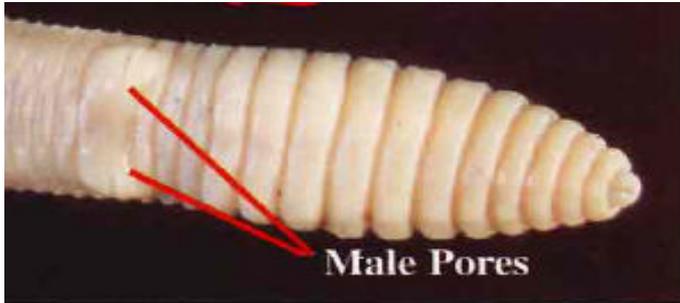
Benefits: Creates large, deep burrows, active to soil depth of 40cm

THE PURPLE WORM *Aporrectodea trapezoides*

LENGTH: 80 to 140mm **DIAMETER:** 3.5 to 8.0mm **SADDLE:** Segments 27/28 to 34/35

COLOUR: Purple brown on upper side (sometimes green sheen or rainbow coloured), pale underside

MARKINGS: Male pores (segment 15) large, pale and swollen



Raised male pores on segment 15

The purple worm *Aporrectodea trapezoides*

Status: Very widespread and abundant

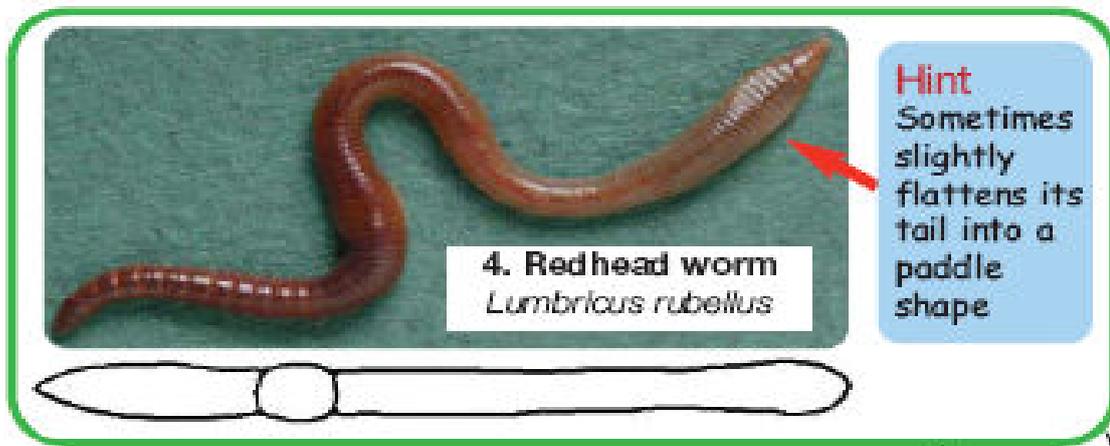
Benefits: Creates burrows >2mm diameter, capable of mixing organic matter to 20cm depth

THE RED WORM *Lumbricus rubellus*

LENGTH: 60 to 130mm **DIAMETER:** 3.0 to 5.0mm **SADDLE:** Segments 27 to 32

COLOUR: Port-wine red colour with purple sheen on upper side, pale on underside

MARKINGS: Male pores (segment 15) small and barely visible



Pointed mouth region, then bulbous,

Flattening of the tail into a paddle shape



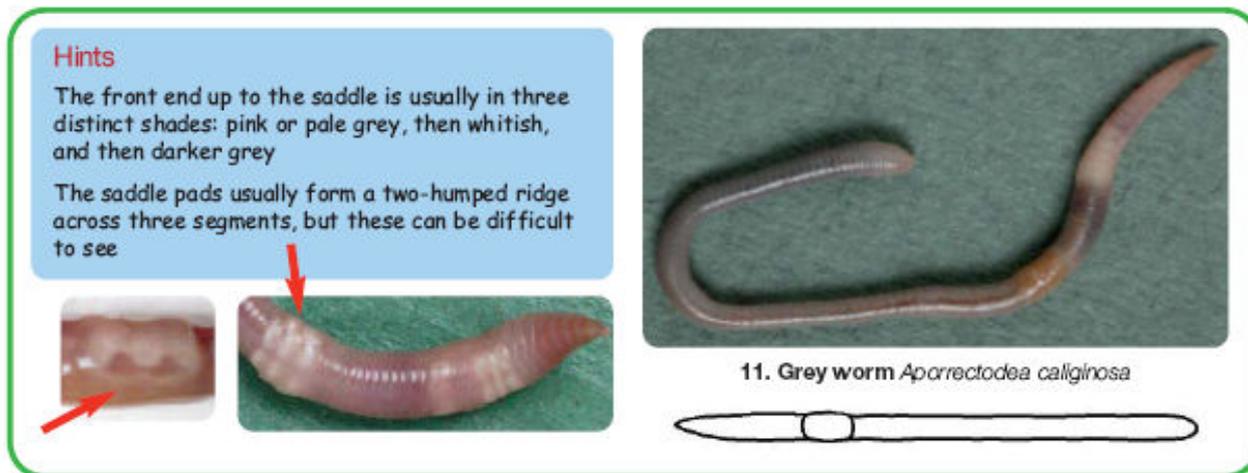
Status: Widespread, low abundance (but dominant under dung pads)

Benefits: Limited, due to confinement under dung pads

The red worm *Lumbricus rubellus*

THE GREY WORM *Aporrectodea caliginosa*

LENGTH: 50 to 85mm **DIAMETER:** 3.5 to 5.0mm **SADDLE:** Segments 28 to 34/35
COLOUR: Pale pink, grey or yellow (depending on soil type)
MARKINGS: Male pores (segment 15) large, pale and swollen



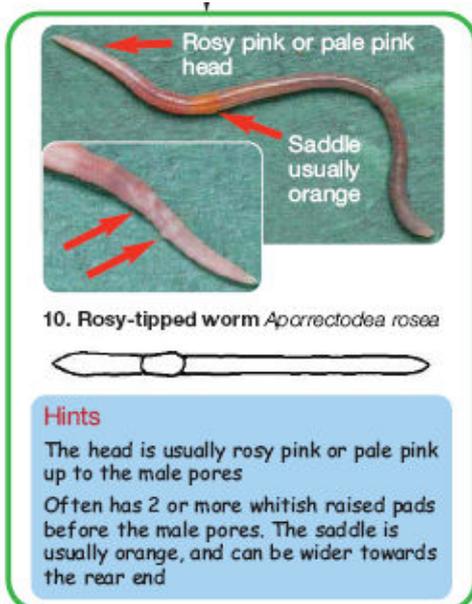
The front end of the saddle (head area) can have distinct shades
 1. **Pink or pale grey**
 2. **Whitish**
 3. **Darker grey**

Status: Widespread and very abundant

Benefits: Creates burrows >2mm diameter, capable of mixing organic matter to 20cm depth

THE ROSY-TIP OR MUCOUS WORM *Aporrectodea rosea*

LENGTH: 25 to 40 mm **DIAMETER:** 2.5 to 4.0mm **SADDLE:** Segments 25/26 to 32/33
COLOUR: Pale pink or grey with pink head region
MARKINGS: Clear rosy-pink head region, prominent red vein on upper side of the body



Detail of rosy pink head region



The rosy-tip or mucous worm *Aporrectodea rosea*

Status: Localised distribution, abundant

Benefits: Creates small burrows, active in upper 10cm of the soil

THE ORANGE-SADDLED WORM *Microscolex dubius*

LENGTH: 40 to 60mm **DIAMETER:** 2.5 to 4.0mm **SADDLE:** Segments 13 to 16

COLOUR: Pale, white to yellow

MARKINGS: Orange saddle close to head region, saddle is annular – completely circles worm, white flecks visible through skin. Male pore at segment 17



Status: Widespread, less abundant

Benefits: Unknown, thought to dominate in recently disturbed soils

The orange-saddle worm
Microscolex dubius

THE PHOSPHORESCENT WORM *Microscolex phosphoreus*

LENGTH: 10 to 35mm **DIAMETER:** 1.0 to 1.5mm **SADDLE:** Segments 13 to 17

COLOUR: Pale pink to white, glows in the dark when disturbed

MARKINGS: Saddle is “annular”: completely circles worm. Male pore at segment 17



Status: Widespread, less abundant

Benefits: Unknown, but small burrows suggest minimal impact on infiltration and mixing

Phosphorescent worm
Microscolex phosphoreus

A proposed introduction – THE LONG WORM *Aporrectodea longa*

LENGTH: 90 to 170mm **DIAMETER:** 4.0 to 9.0mm **SADDLE:** Segments 27/28 to 35/36

COLOUR: Brown-purple on upper side (sometimes with green sheen), pale on underside
Area in front of saddle (head end) is darker than area behind saddle (tail end)

MARKINGS: Prominent glandular area (segments 9, 10 and 11) on the under side



Status: confined to Tasmania – nursery site trials being conducted across the North East in 2010/11

Benefits: Makes permanent burrows, increased infiltration, mixes organic matter to depth

Information, photographs and diagram used in identification guide sourced from:

Baker, G. & Barret, V., 1994, Earthworm identifier, CSIRO Australia

Hollier, C. & Mele, P., 1995, Worm Wise II – A pictorial guide to the paddock earthworms of south eastern Australia

Opal Soil and earthworm survey – Imperial college London <http://scienceforcitizens.net/project/451/>

This material was developed as part of the Kiewa Catchment Landcare Group's Earthworm Project. The project is funded by Caring for our Country: Community Action Grants – Sustainable farming. For more information visit the project website: <http://northeast.landcarevic.net.au/kiewa/projects/aporrectodea-longa-earthworm-project>