

# Scale Insects

*Various genus and species*

Coccidae family

Hemiptera order



*Courtesy Agriculture WA*



Red Scale (*Aonidiella aurantii*) on Lemons

*Courtesy Agriculture WA*



Hard Wax Scale (*Ceroplastes sinensis*).

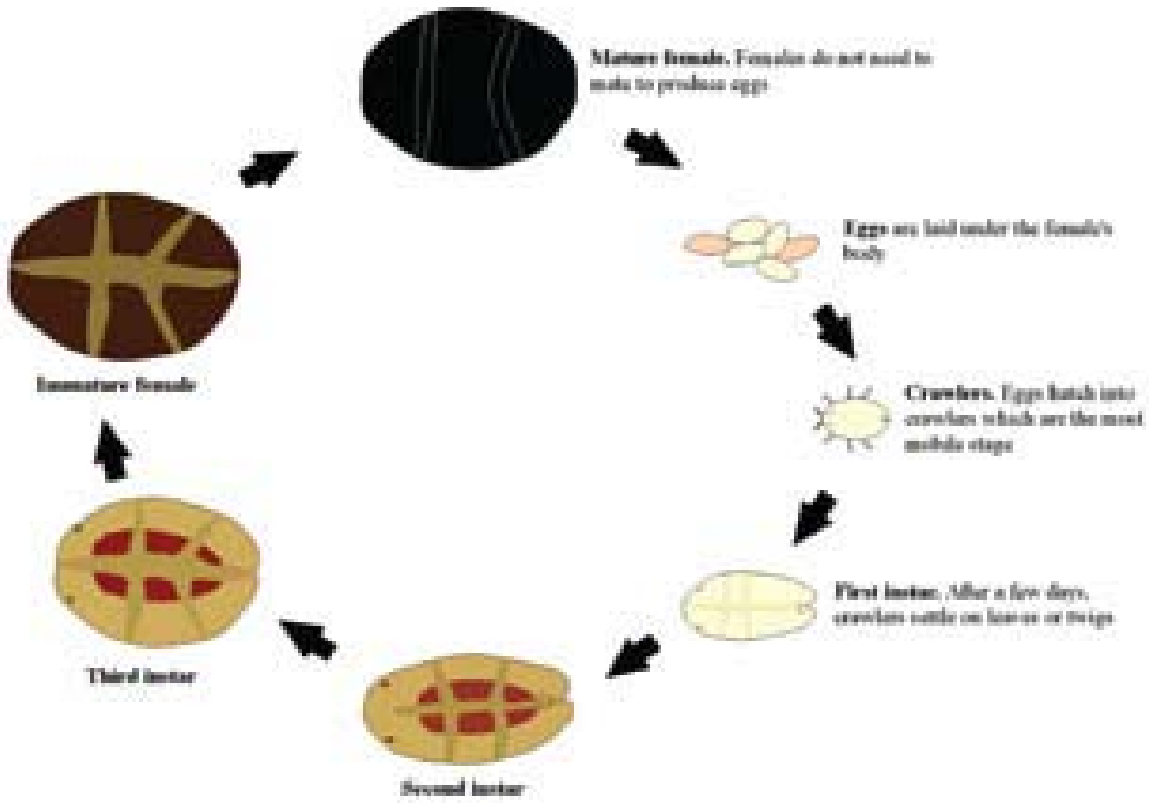
*Courtesy Agriculture WA*



*Aphytis* wasp laying eggs in red scale  
 Courtesy Agriculture WA













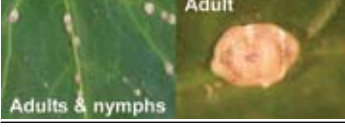



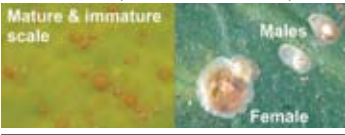







Gumtree Scale (*Eriococcus coriaceus*)  
 Courtesy Agriculture WA



Courtesy Agriculture WA

**Table 1. Scale species found in WA citrus\***

Common name (Scientific name)	Description	Distribution	Action level	Biological control
<b>Soft scales</b>				
Soft Brown Scale ( <i>Coccus hesperidum</i> )	 <p><b>Size:</b> 3-4 mm  <b>Nymph:</b> yellow-green, yellow-brown, flat &amp; oval.  <b>Adult:</b> brown, sometimes mottled, oval.</p>	All citrus growing areas. Not common in northern WA.	15% or more of green twigs infested.	
Black Scale ( <i>Saissetia oleae</i> )	 <p><b>Size:</b> 3-5 mm  <b>Nymph:</b> yellow-green, flat, oval; late instars have 'H-pattern' on back  <b>Adult:</b> black, dome-shaped, 'H-pattern' not present in older scale.</p>	Most WA citrus growing areas. Also a major pest of olives.	10% or more of green twigs infested with 1 or more scales; mandarins: 5% or more of green twigs infested.	
Citricola Scale ( <i>Coccus pseudomagnoliarum</i> )	 <p><b>Size:</b> 3-4 mm  <b>Nymph:</b> translucent, yellow-green, flat, oval. No H-pattern on back  <b>Adult:</b> grey-brown, mottled, oval</p>	Not common in WA citrus.	15% or more of green twigs infested with 1 or more scales.	
Cottony Cushion Scale ( <i>Icerya purchasi</i> )	 <p><b>Size:</b> 5 mm  <b>Nymph:</b> orange-red body  <b>Adult:</b> red-brown, females may be covered by a mealy secretion; distinctive egg sac (photo left)</p>	Common in citrus, rarely causes damage.	5% or more of green twigs infested with 1 or more scales	
Green coffee scale ( <i>Coccus viridis</i> )	 <p><b>Size:</b> 3-4 mm  <b>Nymph:</b> translucent, yellow-green, flat, oval  <b>Adult:</b> yellow-green, oval, u-shaped gut visible</p>	Rare.	5% or more of green twigs infested with 1 or more scales	
White Wax Scale ( <i>Ceroplastes destructor</i> )	 <p><b>Size:</b> 6 mm  <b>Nymph:</b> white  <b>Adult:</b> white, soft &amp; moist. When squashed, body underneath is red-dark brown</p>	Limited distribution: Harvey, Capel, Nannup.	5% or more of green twigs infested with 1 or more scales.	
Pink Wax Scale ( <i>Ceroplastes rubens</i> )	 <p><b>Size:</b> 3-4 mm  <b>Nymph:</b> pale pink  <b>Adult:</b> when squashed, body underneath is pink-red, lobes either side of body</p>	Rare.	5% or more of green twigs infested with 1 or more scales.	
Hard Wax Scale ( <i>Ceroplastes sinensis</i> )	 <p><b>Size:</b> 7 mm  <b>Nymph:</b> pink-red body, white waxy filaments giving a 'star' shape  <b>Adult:</b> hard pink-white dry wax, body underneath is red</p>	Burekup, Harvey, Capel.	5% or more of green twigs infested with 1 or more scales	
<b>Hard (or armoured) scale</b>				
Red Scale ( <i>Aonidiella aurantii</i> )	 <p><b>Size:</b> 2 mm  <b>Nymph:</b> red, thin, circular  <b>Adult:</b> female – red-brown circular, male - elongated, paler than female</p>	Most common scale pest. Found in all citrus growing areas.	1 – 3+ scales on 10% or more fruit. Later varieties/early-mid season, 1 or more scales on 15-20% or more of fruit.	
Circular black scale ( <i>Chrysomphalus aonidum</i> )	 <p><b>Size:</b> 2 mm  <b>Nymph:</b> brown to black, circular  <b>Adult:</b> female – reddish-brown to black, round; male – elongated</p>	Rare. Also pest of bananas.	10% or of more fruit infested with 1 or more scales.	
Mussel scale ( <i>Lepidosaphes beckii</i> )	 <p><b>Size:</b> 3-4 mm long  <b>Nymph:</b> similar to adult  <b>Adult:</b> female – brown, shaped like a mussel shell; male – brown, narrower</p>	Rare.	20% or more of more fruit infested with 1 or more scales.	

Key:



*Courtesy Sonya Broughton, DAFWA. [www.agric.wa.gov.au](http://www.agric.wa.gov.au)*

**Acknowledgments:**

Collated by HerbiGuide. Phone 08 98444064 or [www.HerbiGuide.com.au](http://www.HerbiGuide.com.au) for more information.