

Draft 04 Apr 2015. I still need to see specimens and get photos of some species before I can finish this. If you use this, please tell me how you get on: mgobc@yahoo.com.

Sitonas and *Tanymecus*. This group includes *Sitona*, *Andrion*, *Charagmus*, and *Coelositona* (the tribe of Sitonini) and *Tanymecus palliatus*. The combination of **large eyes**, rather straight sided and **narrow** elytra, and **short antennae** distinguishes Sitonas from other broad-nosed weevils. *Tanymecus palliatus* is similar in shape, but it has longer antennae, long bristly cheeks, and it is larger than most Sitonas.

All the Sitonas feed on legumes (Fabaceae). Some are found only on gorse *Ulex* and broom *Cytisus*; others have a preference for vetches *Lathyrus* and *Vicia*; for clovers *Trifolium*; or for bird's foot trefoils *Lotus*. Although the different foodplants are often found together, it is worth remembering that any *Sitona* that falls out of a gorse or broom bush is likely to be *Andrion regensteinense* or *Sitona striatellus* until proved otherwise. Another useful guide is that *Sitona lineatus* is abundant and ubiquitous. Unless you are beating gorse or broom, it is a good starting point to assume that what you have found is *lineatus* and then either confirm this or eliminate it and move on to consider other species. This is not an easy group without a good set of reference specimens, but fresh, fully scaled weevils are not as hard to name once you are familiar with them. Often you will have a worn specimen, and then things get more troublesome. The shape of the eyes and the elytra are useful characters when scales have worn away, as is the underlying pattern of pits and the spaces between them, especially on the head and pronotum.

I have split the Sitonas into four groups. The difference between the extremes of bristliness in Group 3 and Group 4 is slight but there are other characters that distinguish the species, and *lineatus* is included in both. Insets next to the Sitonas show a 0.5mm square patch of the elytra at or near the tip.

Sitonas

Group 1. The distinctive *Charagmus griseus* and *gressorius*; and the species with only **hair-scales** (no flat round scales). *Coelositona cambricus*, *cineracens*, *puberulus*, *Sitona gemellatus*.

Group 2. Bristly species with erect hair-scales. Some of these are obviously bristly, even under a hand lens, but others have shorter bristles and need to be looked at more closely. *Andrion regensteinense*, *Sitona hispidulus*, *macularius*, *striatellus*, *ambiguus*, *lineellus* (plus *lineatus* for comparison).

Group 3. Species with almost flat hair-scales and **broad** flat round scales. *Sitona lineatus*, *cyclindricollis*, *ononidis*, *suturalis*, *humeralis*, *sulcifrons*.

Group 4. Species with almost flat hair-scales and **narrow** flat round scales. *Sitona lepidus*, *puncticollis*.

Tanymecus palliatus





On a range of plants. Widespread but scarce in England, Wales, and southern Scotland.




7.5-10.0

Longer antennae than Sitonas. Has unique long **bristles** on the side of the pronotum, creating whiskers behind the cheeks.







Group 1. Large and distinctive species with blackish legs. Distinctive because they have **hair-scales** only, no flat oval or round scales; **or they are griseus**, which is strikingly white below, has a long tapering rostrum, raised alternate ridges down the elytra, and a pom-pom of scales on the scutellum.

Densely covered with round scales	Hair-scales only, no round or oval scales			
<i>Chaagmus griseus</i>	<i>Coelositona cambricus</i>	<i>Coelositona puberulus</i>	<i>Coelositona cinerascens</i>	<i>Sitona gemellatus</i>
				
<p>Legumes. Mostly coastal or on inland sand. 4.5-8.5 A beautiful and distinctive species. The clear ridges on odd interstices are shared only with the very different <i>waterhousei</i>. <i>Charagmus gressorius</i> has recently been found on lupins in Britain. It has an even longer, narrower rostrum, and it can be recognised by a clear white stripe down the centre of the pronotum.</p>	<p>Usually <i>Lotus pedunculatus</i>. Widespread. 4.0-5.5 Pronotum with sides very rounded and swollen, pinched in at the base. Hairs on pronotum recurved, hardly erect. Faint ridges along rostrum almost converge at the pit between the eyes. Rostrum more swollen at the tip than in <i>puberulus</i>, so it has a broader end. Antennae usually blackish, but occasionally brown.</p>	<p><i>Lotus</i>. Very rare. 4.0-5.5 Slightly less swollen pronotum than <i>cambricus</i>, hairs on pronotum more erect, forward pointing. Antennae brown with dark tip. Faint ridges along rostrum groove are parallel to it. Eyes more bulging and rounded than <i>cambricus</i>.</p>	<p><i>Lotus glaber</i>. Rare. 4.3-5.9</p>	<p>Legumes in sandy places and udercliffs. Very rare. 4.0-5.0 Pronotum slightly swollen near the front, sides much less rounded than in <i>cambricus</i> or <i>puberulus</i>. Pits on elytra shallower and blunter than <i>cambricus</i> or <i>puberulus</i>, surface duller. Pronotum microscopically reticulate and dull between pits (smooth and glossy in <i>cambricus</i> and <i>puberulus</i>)</p>





Group 2. Bristly species with **leaning or erect hair scales**. They are presented here in decreasing order of bristliness, and the first three are easily recognised as having long or very long bristles. They are distinct in other ways too: *regensteinense* has a spider-like shape and long legs; *hispidulus* has large but very flat eyes; and *waterhousei* has the most bulging eyes of any *Sitona*. *Sitona macularius* is obviously bristly, like *waterhousei*, but the difference between the last three (*striatellus*, *ambiguus*, and *lineellus*) and the remaining *Sitonas* is not so obvious because the hair-scales of *lineatus* and other species are recurved or slightly leaning towards the tip of the elytra, and they can look bristly. If you are unsure, note that *striatellus*, *ambiguus*, and *lineellus* have more rounded eyes than the species in group 3 (apart from *sulcifrons*, which is distinctive in its raised eyes), and their leaning to erect hair-scales are sparser (sometimes a single row on an interstice), whereas the recurved to leaning hair-scales in group 3 tend to be denser (in rows of two or more).

Very long bristles	Long bristles
<p data-bbox="107 347 371 371"><i>Andrion regensteinense</i></p>  <p data-bbox="860 347 1055 371"><i>Sitona hispidulus</i></p> 	<p data-bbox="1442 347 1664 371"><i>Sitona waterhousei</i></p>
<p data-bbox="107 786 826 978"><i>Ulex</i> and <i>Cytisus</i>. Very common. 3.0-6.0 Pronotum and elytra are more rounded than in other species, creating a cleft where they meet, and making a spider-like profile: other species look more flat-backed (compare <i>lineatus</i> profile below). The long legs and bristles are also distinctive.</p> 	<p data-bbox="860 786 1393 978">Legumes. Very common. 2.8-4.6 Easily recognised amongst the bristly species by the almost flat eyes. <i>Sitona humeralis</i> and <i>suturalis</i> have flat eyes too, but they do not have long bristles.</p> <p data-bbox="1442 786 2123 946"><i>Lotus</i>. Southern, mostly coastal. Uncommon inland. 3.5-4.8 Forehead and rostrum flat to concave with a pit between very rounded, wide eyes that almost look stalked. The head shape is unique.</p>

Group 2 continued.

Long bristles	Short bristles			Very short, recurved bristles
<i>Sitona macularius</i>	<i>Sitona striatellus</i>	<i>Sitona ambiguus</i>	<i>Sitona lineellus</i>	<i>Sitona lineatus</i>
				
<p>Legumes. Uncommon.</p> <p>3.0-4.9</p> <p>Differs from the species to the right by its longer hair scales, more concave rostrum, and mottled elytra.</p>	<p><i>Ulex</i> and <i>Cytisus</i>. Common.</p> <p>2.8-4.7</p> <p>Slightly more erect hairs on elytra than <i>lineatus</i>, more bulging eyes, shorter elytra, larger pits on pronotum. Metallic scales. Compare with <i>lineellus</i> and <i>ambiguus</i>.</p>	<p>Vetches. Widespread but uncommon.</p> <p>2.6-3.8</p> <p>Shares the sequined appearance and metallic scales with <i>striatellus</i>, but on average smaller, with shorter hair-scales (especially on head and pronotum), and slightly more bulging and more oval eyes (longer than wide). Differs from <i>lineatus</i> by the same characters as <i>striatellus</i>, but the hair-scales of <i>ambiguus</i> are not so long, so the difference in bristliness is less apparent.</p>	<p>Clovers and other legumes. Mostly west coast, but scattered elsewhere.</p> <p>2.6-3.7</p> <p>Dense scales carpeting the surface, and they are not metallic, so it does not have the sequined look often found in <i>striatellus</i> and <i>lineellus</i>. The scales are more rounded and blunter than in <i>striatellus</i>, especially on the pronotum and the hair-scales are shorter. End of scape more swollen, especially on the outer edge, than in <i>ambiguus</i> and <i>striatellus</i>. Spaces between pits on head wider and smoother than in <i>ambiguus</i>.</p> <p>Slightly more bulging eyes than <i>lineatus</i>, and more erect hair-scales, elytra slightly more curved at sides and usually shorter, and larger pits on pronotum.</p>	<p>Legumes. Very common.</p> <p>3.4-5.3</p> <p>Hair-scales much shorter than those of the long-bristled species. Differs from the short-bristled species by its less bulging eyes, smaller pits on the pronotum, and straighter-sided, longer elytra. The scales are usually brown or slightly metallic.</p> <p>The difference in bristliness is apparent when compared carefully: the hair-scales of <i>lineatus</i> are less erect, more curved, and denser.</p> 

Group 3. Species with almost flat hair-scales and round or wide oval flat scales (5-6 scales across the wider interstices: if there are 7-10 scales across an interstice see group 4). The hair-scales are often recurved or leaning at the tip of the elytra, so check the eyes if you are unsure whether you have a bristly species (group 2) or not. *Sitona humeralis* and *sulcifrons* have eyes slightly raised above the level of the head, and the head and rostrum are depressed between the eyes, giving the head a crocodile-like shape different from the flat or slightly domed head of the other four.

Eyes not raised above the level of the head		Eyes almost flat	
Eyes rounded	Eyes less rounded	<i>Sitona ononidis</i>	<i>Sitona suturalis</i>
<p><i>Sitona lineatus</i></p> 	<p><i>Sitona cylindricollis</i></p> 	<p><i>Sitona ononidis</i></p> 	<p><i>Sitona suturalis</i></p> 
<p>Legumes. Very common.</p> <p>3.4-5.3 Elytra striped (alternate interstices with either white or dark hair-scales) or plain. Differs from <i>suturalis</i> and <i>ononidis</i>, by its more rounded eyes and narrower, longer elytra; from <i>cylindricollis</i> by its clear stripes without mottling, and its more rounded eyes; from <i>humeralis</i> by its much rounder eyes; from <i>sulcifrons</i> by its straighter and longer elytra and denser covering of scales; and from both <i>sulcifrons</i> and <i>humeralis</i> by its flatter forehead.</p>	<p><i>Melilotus</i>. Widespread in southern Britain.</p> <p>3.6-5.0 Elytra mottled or with mottled stripes. Eyes flatter than <i>lineatus</i>, more rounded than <i>suturalis</i>. Elytra less rounded at sides than <i>suturalis</i>, and head less bull-necked. White scales on shoulders often forming pale patches more obvious than in <i>lineatus</i>. Groove reaches further back than in <i>lineatus</i>, but this is hard to see unless the scales have worn off.</p>	<p><i>Ononis</i>. Scarce and scattered in England and Wales.</p> <p>3.2-4.5 Differs from other species, by the same characters as <i>suturalis</i>. Very like <i>suturalis</i>, but the scales are not metallic, and it has no pale central stripe on the pronotum or a very faint one, much fainter than the side stripes</p>	<p>Vetches. Widespread and common.</p> <p>3.3-4.5 Eyes flatter than <i>lineatus</i> or <i>cylindricollis</i>, head wider and more bull-necked. Hair-scales very short and narrow, flat (not slightly recurved at tip of elytra like in <i>lineatus</i>). Has metallic scales (never metallic in <i>cylindricollis</i> or <i>humeralis</i>, rarely or only slightly metallic in <i>lineatus</i>). Shorter than <i>humeralis</i>, and the flat or slightly raised forehead between the eyes is clearly different from the depressed forehead of <i>humeralis</i> and <i>suturalis</i>.</p>

Group 3 continued.

Eyes raised above the level of the head; crocodile shape outline

Eyes almost flat

Eyes rounded

Sitona humeralis



Sitona sulcifrons



Legumes. Widespread in southern Britain, rare in the north.

3.4-5.1

Shares **crocodile head shape** with *sulcifrons*: the top of the eye is raised slightly above the head, which is depressed between the eyes and along the rostrum. **Eyes flatter** than *cylindricollis* and *lineatus*, and head more **swollen behind the eyes** (like bulging hamster cheeks). Longer elytra than *suturalis*, which has a flat or slightly domed forehead. Usual pattern is distinct: dark, plain area on centre of elytra and pale stripes on shoulders continuing as mottled pale bands down sides of elytra.



Clovers. Widespread and common.

2.6-3.9

Has **crocodile head shape** like *humeralis*. Otherwise it is unlike *humeralis*, and is easily distinguished by its rounded eyes, shorter elytra, and **sparse covering of scales**. **Eyes more rounded** than *suturalis*, which has a flat or slightly domed forehead. **Elytra shorter** than *lineatus* and *cyclidicollis*.

Group 4. A pair of species with a **dense** covering of very **narrow scales** (7-10 across the wider interstices).

Sitona lepidus



Sitona puncticollis

Clovers. Widespread and common.

4.3-5.7

Usually a rich cinnamon brown, **warmer** in tone than other *Sitona* species. Besides having narrower scales, it also differs from group 3 species by having only tiny **pin-pricks** on the head rather than real pits, and in having a broader, chunkier head and pronotum, and thicker antennae.

Third interstice widened at the tip, but the striae are weak at the tip, so this is hard to see (compare *puncticollis*, which has deep, parallel striae at the tip of the elytra).

Clovers. Widespread but not common.

4.7-6.0

Differs from all other group 3 and 4 species by the very narrow, faint groove on the forehead ending in a tiny round pit like a large pin prick surrounded by a **bare area** free from scales, between the eyes (the groove of *lepidus* continues at least to the back of the eyes). The striae are deep and parallel to the tip of the elytra (third interstice weak and widened at the tip in *lepidus*).