

## Orthoptera found in central and southern Andalucía with special reference to the protected areas

### Caelifera : Acrididae

**Acinipe hesperica:** The females of this flightless species are the largest grasshoppers of the region. They are widespread in garrigue, along track sides within the forested areas, orchards and gardens within the hillsides of Málaga. It overwinters as a nymph and the adults are most common from March to June. Found occasionally in the Montes de Málaga Parque Natural.

**Acinipe segurensis:** This species is scattered along the lower montane slopes in garrigue and undergrowth of pine woodland. It normally inhabits open garrigue 30-80cms high, particularly in that dominated by rosemary. It is most common between May and July. It has been found in the Sierras de Tejada, Almirajara & Alhama PN, and the Sierra de Alpujarras.

**Acrotylus fischeri:** This is not a very common species found in arid and sparsely-vegetated areas between 500 and 2000m asl. It has not been found in Málaga, only on the western side of the Sierra Nevada.

**Acrotylus insubricus:** This is a species of sunny, open or sparsely-vegetated habitats, usually being found between 600-1200m. The adults are found in open areas and on tracks and roads, frequently in the mown edges next to the road. They are most abundant in April & May and from August to November. It is widespread in the Sierras de Tejada, Almirajara & Alhama PN, the Montes de Málaga PN.

**Acrotylus patruelis:** This is a species of sparsely-vegetated areas, tracks etc within the thermo-mediterranean zone up to about 500m. It is common within the lower areas of Málaga, particularly around the coast. Mainly found in the spring and autumn and probably over-winters as an adult. It has been found in marginal parts of the Sierras de Tejada, Almirajara & Alhama PN, it is common in the Parajes Naturales de Acantilados de Maro-Cerro Gordo and PN Desembrocadura del Río Guadahorce and at the Laguna Fuente de Piedra Reserva Natural.

**Aiolopus puissante:** This is typically an insect of humid, grassy habitats such as marshes and riversides but will live in drier habitats adjacent to the sea. In Málaga it is widespread in the more humid areas. Commonest in the spring and autumn and probably over-winters as an adult. It has been found in marginal parts of the Sierras de Tejada, Almirajara & Alhama PN, at the back of the beaches in the PN Acantilados de Maro-Cerro Gordo as well as at the Laguna Fuente de Piedra Reserva Natural.

**Aiolopus strepens:** *A. strepens* usually inhabits relatively humid grassland and low-scrub habitats up to 1300m asl [but not marshy, summer-wet ones], however it can also be found early in the year on drier slopes within garrigue like rosemary. Adults can be found throughout the year, but in the drier habitats only in the first half of the year. It is widespread in Málaga and has been found in the Sierras de Tejada, Almirajara & Alhama PN, in the Sierra de Alhama outside the park and at the Laguna Fuente de Piedra Reserva Natural.

**Anacridium aegyptium:** This species inhabits areas of open scrub, tall herbaceous vegetation and woodland edge, including gardens and orchards up to 1000m. It is widespread and quite common in Andalucía. The adults readily fly. It is most common during March & April and from August to October. It has been found in the Sierras de Tejada, Almirajara & Alhama PN, in the PN Acantilados de Maro-Cerro Gordo and in the Montes de Málaga.

**Antaxius kraussi:** This was found in tall grass amongst scrub just outside the parque on the ridge top above Valdeiglesias. I know of no other records from Málaga or the south of Granada. It has only been found just outside the Sierras de Tejada, Almjara & Alhama PN.

**Brachycrotraphus tryxalis:** This species is confined to areas of *Hyparrhenia* grassland and is found below 650m. It is commonly found in Málaga where suitable amounts of *Hyparrhenia* grow. It is most common during July and August. It has been found around the marginal parts of the Sierras de Tejada, Almjara & Alhama PN, in the PN Acantilados de Maro-Cerro Gordo and in the Montes de Málaga.

**Calliptamus barbarus:** Found in grassy areas as a nymph, but most common in garrigue between 15-80 cms high and with 30-60% cover with some herbaceous plants between the shrubs. Much less commonly found in dense scrub or grassland. It is found in thermo-, meso- and supra-mediterranean zones. It is widespread and one of the commonest species in the uncultivated parts of Málaga & SW Granada. Most commonly found from June to September. In Málaga only the red-legged form has been found, unlike in coastal parts of Almería where the orange-legged form predominates. It is common in the Sierras de Tejada, Almjara & Alhama PN, the PN Acantilados de Maro-Cerro Gordo, the Montes de Málaga PN and the PN Desembrocadura del Río Guadahorce.

**Calliptamus wattenwylianus:** It is found in tall grassland in early summer. It is locally common in Málaga y SW Granada in June and July. It has been found at one site in the Sierras de Tejada, Almjara & Alhama PN, below El Torcal, in the PN Acantilados de Maro-Cerro Gordo,

**Chorthippus apicalis:** This is a late spring/early summer species of tall, usually dense grassland, often abundant in abandoned cultivations and roadsides. It is widespread and common in Málaga. It has been found in the Sierras de Tejada, Almjara & Alhama PN where it is rare and widely scattered, in the Montes de Málaga,

**Chorthippus binotatus:** A species of the meso- & supramediterranean zones, found at lower levels in 30cm+ garrigue scattered below open woodland, but at higher levels it favours lower vegetation, particularly hedgehog heaths, often associated with *Eriinacea*. In the mountains this species is common above 1500m, in garrigue and was most abundant in hedgehog heath above 1700m but was also found at lower altitudes, especially in *Ulex* amongst trees. Most commonly found from July to September. It is common in the Sierras de Tejada, Almjara & Alhama PN, the Montes de Málaga and many of the other upland sites in the region.

**Chorthippus jacobi:** This species is associated with grass-dominated vegetation, but this may be amongst quite a lot of dwarf scrub. I have only found it in eastern Málaga on the southern slopes of the mountains below 1150m asl in the extreme north & east of the Province near the coast but it is not uncommon in the mesomediterranean zone over the border in southern Granada. It is a bivoltine species found most commonly in May & June and again from late August to early October. It is scattered across the northern parts of the Sierras de Tejada, Almjara & Alhama PN, in the PN Acantilados de Maro-Cerro Gordo as well as in other sites to the north such as the Sierra Nevada and the Sierras de Baza.

**Chorthippus jucundus:** This species inhabits tall, humid marsh and river-side vegetation, including montane flushes up to 2000m. It is not common in the region and has not been found in Málaga though at a few other sites in Granada. It has been found in tall river-side grassland within or around the semi-shade of trees south of Fornes in the Sierras de Tejada, Almjara & Alhama PN. Found most commonly from July to September.

**Chorthippus nevadensis:** It was found primarily in stony Erinacetalia heaths with less than 40% vegetation cover between 1665 & 1950m asl, in both the Málaga & Granada parts of the Sierras de Tejada. [Identification confirmed by David Lluçà Pomares]. This is a Spanish endemic species otherwise only found in the Sierra Nevada range & near-by Sierra Arana. It inhabits alpine hedgehog heath in the higher parts of the mountains. Commonly found in July and August.

**Chorthippus parallelus erythropus:** This species has been found with *C. jucundus* in grass and *Juncus* in montane flushes at about 2000m in the Sierra Nevada.

**Chorthippus vagans:** This species inhabits grassland and garrigue and at lower levels [in this area] is usually associated with sparse woodland where they shelter in the shade of trees, but at higher levels it is found in treeless areas of garrigue, grassland or the denser hummock heath around the bottoms of the shallow valleys. It is common in Málaga and mostly found from July to September. It is common in the Sierras de Tejada, Almirajara & Alhama PN and in the Montes de Málaga PN.

**Dericorys carthagonovae:** This species is normally found near the coast. It has been found in open sandy grassland in fixed dunes between scattered patches of scrub on the coast of Almería.

**Dociopterus jagoi occidentalis:** This species is usually found in sparse grassland, commonly in annual grassland communities. It is a very common and widespread species in this region up to about 1500m asl, though mostly below 1200m. It is mostly found from July to September. It is common in the Sierras de Tejada, Almirajara & Alhama PN and in the adjacent PN Acantilados de Maro-Cerro Gordo, in the Montes de Málaga PN, the PN de Desembrocadura del Río Guadahorce and at the Laguna Fuente de Piedra Reserva Natural.

**Dociopterus maroccanus:** This is one of the 'locust' species of the Mediterranean basin that can build up into very large plague populations and cause considerable damage to arable crops. It was found in the sandy areas amongst scattered scrub on the northern side of the Sierra de Baza.

**Euchorthippus chopardi:** This is a species of dry grassland up to about 1900m asl and is particularly associated with those grasses with stiff, inrolled leaves like *Stipa* and *Brachypodium phoenicoides*, and at times, especially under woodland, with *Brachypodium retusum*. It is widespread and quite common in western Málaga & southern Granada. Commonly found from July to October. It is common in the Sierras de Tejada, Almirajara & Alhama PN, in the Montes de Málaga PN,

**Eumigus cucullatus almeriensi:** Found amongst short rocky garrigue, a times with esparto grass, but also in montane cushion habitats. I believe these are the first records from Málaga [Identification confirmed by David Lluçà Pomares]. They are mostly found from late March to July. It is scattered in the Sierras de Tejada, Almirajara & Alhama PN.

**Eumigus monticola:** This indigenous species inhabits garrigue and rocky ground in and around pine woodland and mountains. Adults are normally found in early summer. It is scattered in the Sierras de Tejada, Almirajara & Alhama PN also in the Sierra Nevada and Sierra de Baza.

**Euprepocnemis plorans:** This species is found in damp habitats with tall vegetation and scrub, normally in coastal areas but also along some river valleys farther inland. Around the coast it can also be found in some drier scrubby areas, particularly in disturbed or abandoned agricultural areas. It is locally common along the coast of Málaga and will penetrate inland along the damper parts of the river valleys such as that of the Río Vélez where it reaches Trapiche. It is most common in autumn & spring and over-winters as an adult. It is locally common at the southern tip of the Sierra de Almirajara and in the adjacent Parajes Acantilados de Maro-Cerro Gordo, at the PN Desembrocadura del Río Guadahorce.

**Euryparyphes terrentulus:** This is a Spanish endemic inhabits short to medium garrigue with plenty of herbs up to 1000m asl but mostly below 700m asl. It is quite common in the thermomediterranean parts of Málaga & south-eastern Granada. Found mainly from March to June. It is locally common around the north-west end of the Sierras de Tejeda and in the Montes de Málaga,

**Granada imitans:** This is a species of dry sandy grassland. It has been found in the coastal fixed dunes and dune woodland near Mazagón, Huelva and to the south of the Cape of Trafalgar, Cadíz.

**Heteracris litoralis:** This is a coastal species abundant scrub and tall herbage along parts of the Andalusian coast but not common in Málaga. It is found at the PN Desembrocadura del Río Guadahorce.

**Locusta migratoria:** Found in scrub and tall grassland or herbage This is a species with a preference for damp grassland but is very mobile and can be found in drier habitats, particularly in the more fertile areas but is most common in coastal areas. It is widespread, but not common in Málaga and SW Granada. It can be found at any time of the year except mid-winter. It has been found in the southern parts of the Sierra de Almirajara and the neighbouring parts of the PN Acantilados de Maro-Cerro Gordo, at the Laguna Fuente de Piedra Reserva Natural,

**Morphacris fasciata:** This is an African species that has gained a foothold in SW Iberia. It was found on dry coastal salt marshes at Mazagón, Huelva.

**Oedipoda caerulescens:** This is a species of dry, sparsely-vegetated habitats up to 2900m asl, the adults are often seen on roads and tracks. It is common in Andalusia from June to October. Abundant in places. It is common in the Sierras de Tejeda, Almirajara & Alhama PN, in the PN Acantilados de Maro-Cerro Gordo and the Montes de Málaga PN.

**Oedipoda charpentieri:** This is a species of dry, sparsely-vegetated habitats, usually more thermo-xerophilic than those of the above species and is confined to the thermomediterranean zone. It is not only found on rocky hillsides but also in dunes and salt pans. It is not common in Málaga & Granada but more common on some of the coastal parts of Almería. Found on the northern edge of the Sierras de Tejeda, Almirajara & Alhama PN on hillside between the southern arms of the Embalse de los Bermejales. It also occurs at the Laguna Fuente de Piedra Reserva Natural.

**Oedipoda coerulea:** Found in similar habitats to *O caerulescens* and often found with it but in this area appears to be limited to the meso- and supramediterranean zones. It is not particularly common in Málaga & Granada but occurs in a few parts of the Sierras de Tejeda, Almirajara & Alhama PN.

**Omocestus minutissimus:** This Iberian endemic is found in calcareous habitats, often in grassy patches, amongst open garrigue and hedgehog heath in the supramediterranean zone but further north in Spain it is found at lower altitudes, Most common from July to September. It is quite common in the Sierras de Tejeda, Almirajara & Alhama PN above 1500m in pockets of grassland within the hedgehog heath and upland garrigue. Also found in the Sierra Nevada and Sierra de Baza.

**Omocestus panteli:** A endemic species of marshes, montane flushes, humid winter-wet grassland and river-sides up to 2600m. It has been found in at a few sites in eastern Málaga and Granada. It commonly found from July to September. In the Sierras de Tejeda, Almirajara & Alhama PN it occurs in tall riverside vegetation south of Fornes and in flushes on the southern side of the Sierra de Zafarraya.

**Omocestus raymondi:** A species of garrigue and dry grassland, mainly in the thermo-mediterranean zone but can also be found in the lower parts of the meso-mediterranean zone. It is widespread and quite common in Andalusia. It is found from September through to June but most common in late autumn and the spring. It is locally common in the lower parts of the Sierras de Tejeda, Almirajara & Alhama PN, in the PN Acantilados de Maro-Cerro Gordo and in the Montes de Málaga PN.

**Pezotettix giornii:** It is a species most common in mixtures of garrigue and grassland up to 1800m asl but can also be found in more extensive areas of these two habitats. Sometimes in sparse scrubland or woodland edges or gardens or abandoned areas of cultivation or orchard. Common in Andalusia. Can be found from September throughout the winter into May but is most common in the autumn and early spring. It is common in the Sierras de Tejeda, Almirajara & Alhama PN, in the PN Acantilados de Maro-Cerro Gordo, the Montes de Málaga PN.

**Ramburiella hispanica:** Not uncommon amongst tussocks of the grass *Macrochloa tenacissima* on cliff tops and in the Sierras up to 1900m. This is a species of esparto grassland of *Macrochloa tenacissima* though is occasionally found with grasses of a similar habit. It is not uncommon in the upland areas of eastern Málaga & southern Granada. Most common from June to September. It is widespread in the Sierras de Tejeda, Almirajara & Alhama PN, on a cliff top in the PN Acantilados de Maro-Cerro Gordo and in the Montes de Málaga.

**Sphingonotus azurescens:** This is a species of dry, semi-bare, sunny habitats from coastal dunes up to 1700m asl but usually below 1000m. It is widespread and quite common in Málaga and SW Granada. It is scattered but not common in the Sierras de Tejeda, Almirajara & Alhama PN, in the Montes de Málaga PN, in the PN Desembrocadura del Río Guadahorce.

**Sphingonotus caeruleus:** This is a species of dry, very sparse vegetation, from coastal dunes to scree and upland habitats. It is widespread but not abundant in eastern Málaga and southern Granada. Common from June through to September. It is found at all levels of the Sierras de Tejeda, Almirajara & Alhama PN and is the only species commonly found on the summit of Maroma. in the Montes de Málaga and also at the Laguna Fuente de Piedra Reserva Natural.

**Stenobothrus bolivari:** This is a Spanish endemic species of mesotrophic montane grasslands, generally uncommon, though not uncommon on some of the mountain ranges in Granada. I am not aware of any records from Málaga. Most common from mid-May to July. Only found on a grassy slope with scattered hawthorns just inside the Parque Natural at the eastern end of the Sierra de Almirajara about 1050m asl. It is common in parts of the Sierra de Baza and Sierra de las Nieves.

**Stenobothrus festivus:** This species can be found in a variety of habitats: grassland, hedgehog heath, rocky hillsides, sparse garrigue, between sea level & 2200m. I have found it at two sites in south-east Granada both with rocks & patches of grassland amongst scrub and dwarf scrub between 1000 & 1100m in May & June. In the Sierras de Tejeda, Almirajara & Alhama PN only on a rocky slope just east of the El Robledal recreational area.

**Tropidopola cylindrical:** This is a species of swamps and marshes, particularly those dominated by *Phragmites australis*. It is locally common on parts of the coast of Almería but it has only been found at one site in Málaga: the Laguna Fuente de Piedra Reserva Natural.

**Truxalis nasuta:** This is a species of dry grassland and grassy garrigue, it is particularly common in coastal grassland. It is found around the Mediterranean basin. It is mainly found around the coastal parts and dry river valleys of Málaga but also at times on some hillsides. Most common

from April to June. It is found in the southern parts of the Sierra de Almirajara and the adjacent coast of the PN Acantilados de Maro-Cerro Gordo, also in the PN Desembrocadura del Río Guadahorce, at the Laguna Fuente de Piedra Reserva Natural,

### **Caelifera : Pyrgomorphidae**

**Pyrgomorpha conica:** . It is a species of dry, hot places, normally below 1000m asl. I have not found it in Málaga but it is very common in some other parts of the south coast of Andalucía. The adults can be found in spring and summer. Within the Sierras de Tejeda, Almirajara & Alhama PN this species was only found in the valley of the river Calcin amongst sparse vegetation along the rocky valley bottom

### **Caelifera: Tetrigidae**

**Paratettix meridionalis** This species is found on open mud and rock within marshes, flushes and riversides, usually below 1000m, and swims readily. It is the only widespread species of Tetrigidae in southern Spain and is quite common in Málaga where suitable habitat occurs. Pockets of it occur in the Sierras de Tejeda, Almirajara & Alhama PN.

### **Ensifera: Gryllidae**

**Acheta hispanica:** A Spanish endemic which now appears to be much less common than in the past. Found in urban places in Málaga and females have come to light in a marginally-urban situation.

**Arachnocephalus vestitus:** This strange-looking, silent and tiny cricket inhabits trees and scrub in and around deciduous or mixed woodland. It was found on *Quercus suber* and *Crataegus* scrub at the NW end of the Sierra de Tejeda between 1000m and 1300m asl. It has been found in the Sierras de Tejeda, Almirajara & Alhama PN, the Montes de Málaga, and near Comares in August and September.

**Eugryllodes pipens:** This species was found below dense scrub and young woodland in the Montes de Málaga.

**Gryllomorpha longicauda:** This cricket, indigenous to southern Iberia, lives amongst leaf litter of woodlands and in areas with scrub and rocks but sometimes also coming into buildings during the latter half of the year. The adults appear in the autumn and early winter. It is not uncommon in Málaga and southern Granada and has been found in the Sierras de Tejeda, Almirajara & Alhama PN and in the Montes de Málaga PN.

**Gryllotalpa africana:** This subterranean species has been found once in a garden near Comares, Málaga. **G gryllotalpa** has been heard singing in the horticultural areas north of the Sierra de Alhambra.

**Gryllus bimaculatus:** This species is found in a wide variety fairly open habitats within the thermomediterranean zone, usually below about 500m and often associated with dry river beds and floodplains and urban parks. It is common in the lower, warmer parts of Málaga with a little humidity, like river beds. Although it can be found throughout the year, it is most common from

May to October. It occurs in the PN Acantilados de Maro-Cerro Gordo, is common at the Laguna Fuente de Piedra Reserva Natural.

**Oecanthus dulcisonans:** As its name suggests, this species has a quieter song than *O pellucens*. It appears to inhabit similar habitats to *pellucens*: tall, dense herbage in area of scattered scrub and trees but may occur at lower levels, I have not found it above 400m. It appears to be not uncommon in the lower parts of Málaga. Adults are found from July to October. It is found in a few places on the lower western slopes of the Sierra de Tejada and in the PN Acantilados de Maro-Cerro Gordo.

**Oecanthus pellucens:** Despite being called Tree Crickets, *Oecanthus* sp are usually found in tall herbage, though frequently in association with trees or scrub. Although they are small, they are often the loudest cricket calling in the summer night. However, it appears to be widespread and quite common in Málaga. Found commonly from June to October. It has been found in oak woodland on the northern side of the Sierra de Tejada and in the Montes de Málaga PN.

**Mocicogryllus bordigalensis:** This cricket is widespread in Málaga in damp places grassy such as floodplains, coastal and inland marshes, irrigated land and parks. It is found in the PN Desembrocadura del Río Guadahorce and at the Laguna Fuente de Piedra Reserva Natural.

**Paramogoplistes ortini:** This small cricket lives in leaf litter within broad-leaved woodland, in this area usually *Quercus rotundifolia* or *Q. suber*. It has only recently been taxonomically separated from *Mogoplistes brunneus* which now relates to the populations farther north in Spain. It locally common in Málaga. The adults are found in late summer and autumn. It has been found near Comares and in the Montes de Málaga.

**Petaloptila malacitana:** This cricket often inhabits caves and was first found in the Nerja Caves. It also comes into my house near Comares in the late winter and early spring.

**Pteronemobius heydenii:** This small cricket is an insect of river and lake sides and marshes, living on mud and amongst vegetation and rocks. The adults appear in summer. It was found on mud between vegetation at the side of the southern arm of the Embalse de los Bermejales a little way outside the Sierras de Tejada, Almijara & Alhama PN but it is also possible that it occurs alongside the River Calcin inside the parque.

**Scobia caleindrum:** This species was found under a stone in an area of open garrigue and scattered scrub in the Sierra de las Nieves PN at about 800m asl.

**Svercus palmetorum:** This cricket is found in damp grassland, ditches and river beds. It occurs in a number of places on the western side of Vélez-Málaga where it mixes with *Mocicogryllus bordigalensis*.

## **Ensifera: Tettigoniidae**

**Canariola emarginata paynei:** A single male was found in August on a tall, mature *Quercus suber* in mixed *Q. suber* – *Pinus halepensis* woodland near the north-west corner of the Sierra de Tejada. All of the genus *Canariola* are very localized and rare and the Iberian ones have only been described relatively recently.

**Conocephalus conocephalus:** Like other members of this genus it inhabits marshes, fens and emergent waterside vegetation. It has been found in marshes in the floodplain between Vélez-

Málaga and Torre del Mar. Nymphs of a *Conocephalus* species have also been found in emergent vegetation on the edge of the Río Guadahorce at Guadalar.

**Ctenodecticus granadensis:** This is a Spanish endemic species of rocky montane hedgehog heath originally only found in the Sierra Nevada range. In the Sierra de Tejada it was only in Málaga province in dwarf hummock scrub [mainly *Erinacea anthyllis*] at about 1750m, near the tracks up to Maroma from Canillas de Aceituno and Cortijo de Alcazar. [Identification confirmed by David Lluçia Pomares]. Found in July & August.

**Decticus albifrons:** This large species inhabits tall, dry, often annual, herbaceous vegetation, brambles etc. It is widespread and common in the thermomediterranean part of Málaga. Mainly found from June to August. It is very local in some of the lower parts of the Sierras de Tejada, Almirajara & Alhama PN, in the PN Acantilados de Maro-Cerro Gordo, in the Montes de Malaga and at the Laguna Fuente de Piedra Reserva Natural,

**Odontura aspericauda:** Found in mixed garrigue at 800-900m asl. A smallish, easily-overlooked species of mixed, usually herb-rich garrigue and gardens. It is widespread in Andalucía. It overwinters as a nymph, the adults are mainly found from March to June. It occurs on the western slopes of the Sierra de Tejada.

**Odontura glabricauda:** Found in much the same sort of habitats as the previous species but is much less common. It occurs in the Sierra de Zafarrela at around 1000m asl in areas of garrigue and herbage, often amongst scattered oaks.

**Phaneroptera nana nana:** This is a species of scattered scrub and tall herbage from sea level up to around 1500m, often around woodland edges and in maquis. It is not found in the driest areas, preferring a degree of humidity. It is widespread in Málaga and SW Granada. It is common from August to October. It is very local in some of the lower parts of the Sierras de Tejada, Almirajara & Alhama PN and in the Montes de Málaga.

**Phaneroptera [nana] sparsa:** This is a species of scattered scrub and tall herbage from sea level up to around 600m, often around woodland edges and in maquis. Some authorities regard it as a sub-species of *P nana*. It is not found in the driest areas, preferring a degree of humidity. It is widespread in the warmer, lower parts of Málaga. It is common from August to October. It is very local in the southern parts of the Sierras de Tejada, Almirajara & Alhama PN and in the PN Acantilados de Maro-Cerro Gordo.

**Pycnogaster inermis:** This species has been found in open, short garrigue and herbage between 1500 and 2500m asl in the Sierra de Baza and the western side of the Sierra Nevada.

**Platycleis affinis:** This species inhabits medium to tall, usually annual, herbage and grasses that is frequently associated with scattered low scrub and was found up to 1350m asl. Most common from June to September. It is widespread in the northern parts of the Sierras de Tejada, Almirajara & Alhama PN and in the Montes de Malaga PN.

**Platycleis albopunctata:** The *Platycleis* species are found in very similar habitats and sometimes in the same locality. This species inhabits medium to tall, usually annual, herbage and grasses from 300-1700m, but most common within the mesomediterranean zone. Most common from July to September. It is found in the Sierras de Tejada, Almirajara & Alhama PN.

**Platycleis intermedia:** This species inhabits medium to tall, usually annual, herbage and grasses as well as somewhat shorter patches between hummock vegetation at higher altitudes up to 1900m



asl here. Most common from June to September. It has a scattered distribution in the Sierras de Tejada, Almirajara & Alhama PN and in the Montes de Málaga PN.

**Platycleis sabulosa:** This species tends to occur in more open and xerophyllic vegetation than other *Platycleis*. It has been found in sparse garrigue on the sandy hills near Fonelas, Granada, amongst coastal scrub on the Cota Doñana and the Cota de Gata. It was also found at the Laguna Fuente de Piedra Reserva Natural and near Cáñar, Granada.

**Pterolepis spoliata:** Common on the coastal hillsides, less common in the Sierras up to 1050m asl. This species inhabits thick tall garrigue of various types. It is common in many parts of Málaga. Most common from July to September. It has a scattered distribution in the Sierras de Tejada, Almirajara & Alhama PN, in the PN Acantilados de Maro-Cerro Gordo and it is common in the Montes de Málaga PN.

**Ruspolia nitidula:** A species of marshes, fens and wet grassland. It occurs in a number of places within the floodplain or the Río Vélez. It is also found in the Río Guadahorce floodplain at the PN de Desembrocadura del Río Guadahorce.

**Steropleurus andalusius:** This large, flightless species inhabits areas of mixed garrigue and herbs, often on open hillsides but also around larger scrub and trees, within woodland edges and woodland rides, occasionally just in patches of grassland. It is widespread and quite common in Málaga below about 1000m. Found mainly from June to September. It is widespread in the lower parts of the Sierras de Tejada, Almirajara & Alhama PN and in the Montes de Malaga PN.

**Tessellana tessellate:** This species inhabits medium to tall [normally] annual herbage and grasses and was found up to 1600m asl. It is common in Málaga. Found most commonly from July to September. It is widespread in the lower parts of the Sierras de Tejada, Almirajara & Alhama PN, in the PN Acantilados de Maro-Cerro Gordo.

**Tettigonia viridissima:** This species inhabits medium to tall [normally] annual herbage and grasses and was found up to 1200m asl. It is common in Málaga from July to September. It is locally common on some of the lower slopes of the north-western part of the Sierras de Tejada, Almirajara & Alhama PN and in the Montes de Málaga.

**Thyreonotus corsicus:** It is a species of scrub and woodland, often living within thick undergrowth. It is widespread but not common in Axarquía. The adults appear in summer. This species was can be found in the mixed woodland at the NW end of the Sierra Tejada.

**Tylopsis lilifolia:** This is a species of tall, grassy, herbage up to about 1200m asl, though most common in the thermomediterranean zone. It is common on the hills of Málaga around abandoned areas of cultivation and uncultivated edges of orchards, roadsides etc. Most commonly found from July to September. It is quite common within the Montes de Málaga PN.