

New Lepidoptera from the Homer-Milford District.

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Ichneutica notata n. sp.

Plate 1. Figs. 2 and 3.

In 1914 (Vol. XLVII Trans. N.Z. Institute, p. 192) Alfred Philpott described a new species of *Aletia* under the name of *lata*. Subsequently, this was shown to be an *Ichneutica*, and up to the present time it has remained as *Ichneutica lata*. In January last I captured at the Homer a very fine specimen of a female moth which I thought might be a female *Ichneutica*, possibly *lata*; and in attempting to identify this moth I had recourse to the type specimens of *Ichneutica lata* which are in the Dominion Museum collection. Examination of these types showed at once that they are none other than specimens of *Ichneutica cana* Howes, which means, therefore, that *Ichneutica lata* Philpott is a synonym of *Ichneutica cana* Howes (Vol. XLVI Trans. N.Z. Institute, p. 96). This is further borne out by reference to Philpott's original description of *Aletia lata*, which obviously is an excellent description of *Ichneutica cana*. The issue is further complicated by the fact that a fine specimen of a male *Ichneutica* collected by Mr. A. Hamilton on Mt. Peel, Nelson, in December, 1910, had been placed in the Museum collection under the name of *Ichneutica lata*, and this undoubtedly was the specimen used by Mr. G. V. Hudson when he made his figure of *I. lata* in his work on the Butterflies and Moths of New Zealand. This moth certainly is not the same as Philpott's type specimen of *lata*, and, therefore, will have to be given a new name. The female moth I captured at the Homer in January last agrees very closely in its markings with the male specimen from Mt. Peel; and I am satisfied that the two specimens are correctly related as male and female of the one species, which I am calling *Ichneutica notata*.

The male *Ichneutica notata* is excellently figured in colour in Mr. G. V. Hudson's monograph on the "Butterflies and Moths of New Zealand," Plate VI, Fig. 23. Fig. 24 on the same plate, which is given as the female of *Ichneutica lata*, really is the female of *Ichneutica cana*. The description of *Ichneutica lata* given on page 51 of Mr. Hudson's work apparently was made largely from the male specimen of *Ichneutica notata* collected by Mr. Hamilton, and is substantially a correct description of *I. notata* except for the references to the female. The following is taken largely from Mr. Hudson's description:—

In the male the body is greyish-brown with some ochreous shading on the face and across the top and sides of the thorax. The antennae dull orange-brown, strongly bipectinate, the pectinations about 5. The expansion of the forewings is 39 mm. The forewings are dull greyish-brown thickly speckled with blackish and ochreous scales, the central area being darker; the basal and first lines are broad, wavy, dull-white, edged with blackish; the orbicular is rather small, round, white with a dusky central dot; the claviform very distinct also whitish; the reniform irregularly oblong, dull white with a dusky central line; the second line is very conspicuous, deeply indented between the veins, white edged with blackish; there is a subterminal series of cloudy black spots, followed by a cloudy ochreous band; the cilia are dull brownish-grey barred with blackish. The hind-wings are dull greyish-brown with a cloudy discal lunule; the cilia are also greyish-brown with obscure darker bars.

In the female the body is pale rosy-brown with a heavy intermingling of silvery-grey hairs on the head and thorax.

The expansion of the wings is 43 mm. The general colour is paler than in the male and of a pleasing pale rosy-brown; the markings follow closely those of the male, the first and second lines dark reddish-brown with only a faint ending of whitish ochreous, the *terminal ochreous band is very conspicuous and barely, if at all, clouded*; the reniform is more conspicuous, silvery-white with only a very faint dusky central streak; the cilia are *pinkish-ochreous barred with brown*. The hindwings are pale pinkish-ochreous with the veins outlined in a darker shade; the cilia white with irregular pale brown bars and a deeper brown basal line.

Types: male, Mt. Peel, Nelson, 28-12-1910. Collected by A. Hamilton; female, Homer, 1-1-45, taken at light during very heavy rain. Collect. J.T.S.—both in Dominion Museum Collection.

This species forms one of a trio of closely related and somewhat similar species of *Ichneutica* of which the other two are *Ichneutica cana* Howes and *Ichneutica marmorata* Hudson. It is readily distinguished from *cana* and from *marmorata* by its much longer antennal pectinations, and from *cana* also by the second line, which is strongly dentate throughout its entire length in *cana* but almost without denticulations on the first third of its length from the costa in *notata*.

Euxoa admirationis. Guen. susp. obscura n. subsp.

Plate 1. Figs. 5 and 10.

A very dark form of this moth occurs at Milford Sound in which both fore and hind wings are very dark grey and the orbicular is considerably elongated, much more so than is usual in this species. In other respects it resembles *admirationis* closely but I think it is worthy of recognition as a distinct variety for which I propose the name *obscura*.

Locality: Milford Sound. Arthur River Bed; taken at light just after dusk. Collect J.T.S. When the night has become quite dark the species disappears. A good series also was taken in the same locality at the same time by Mr. T. M. Smith of Dunedin.

Types and Paratypes of the variety *obscura* in the Dominion Museum Collection.

Aletia cuneata Philp.

This species, which is fairly rare, can now be recorded from the Homer, where I captured a fine specimen at light on 1.1.45 during very heavy rain.

Chloroclystis lacustris Meyr.

Plate 1. Fig. 4.

Included here is a photograph of what undoubtedly is the female of this species. The female *lacustris* has not been recorded before. The markings follow closely those of the male.

Face white, speckled with green. Thorax pale brown in front followed by a white transverse band, black behind. Abdomen creamy-white with a very broad black anterior band. The ground colour of the forewings is pale creamy-white, the markings picked out in dark-brown, reddish-brown and black scales suffused with green, particularly along the costa. Cilia creamy-white, barred with black. Hind-wings creamy-white suffused towards base with pale greyish-brown and marked with two darker brown lines; cilia creamy-white barred with dark brown.

Taken at light at the Homer, December, 1944. Coll. J.T.S. Type, female, in Dominion Museum Collection.

Hydriomena venustatis n. sp.

Plate 1. Fig. 11.

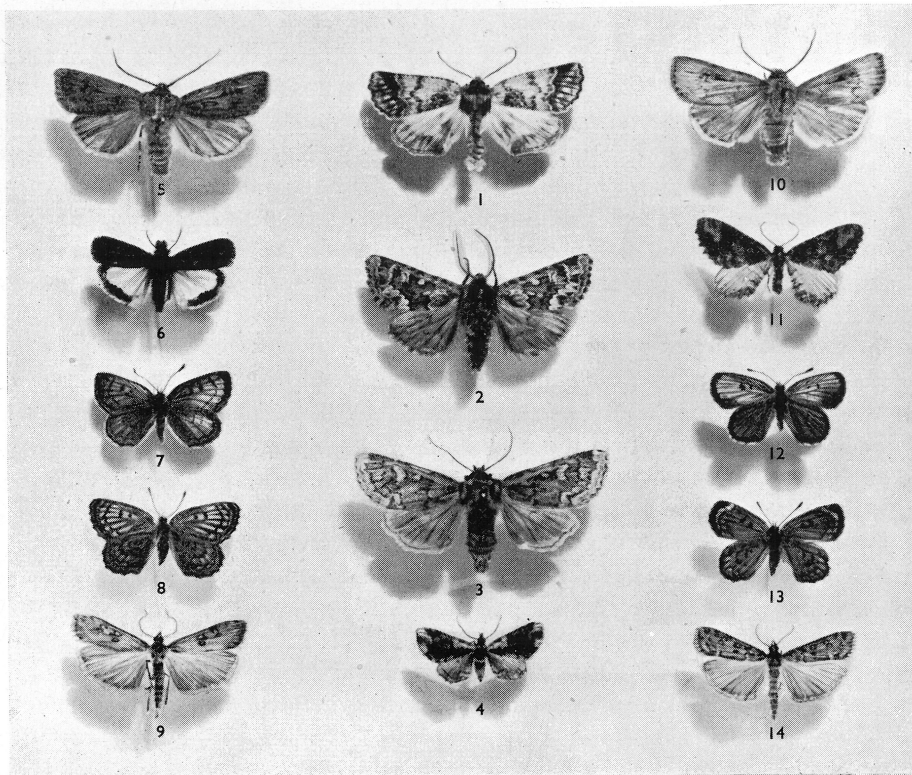
Face yellowish, palpi black. Top of head and thorax with heavy clothing of intermingled black, ochreous-green, and red-brown scales. Antennae with strong broad serrations from about one-fifth above base to tips. Abdomen ochreous, with segmental margins marked by red-brown and black scales, and with two prominent ochreous anal tufts. The expansion of the wings is 30 mm. Forewings *rather elongate with apical portion somewhat dilated*, termen distinctly bowed and *strongly scalloped*; dull-green with numerous wavy, somewhat indistinct, transverse black lines; *a large, sub-apical, kidney-shaped brick-red patch*; faint reddish shading extending to middle of wing, and below disc; first line broad, black, and strongly bent towards base; second line obsolete from about half-way across wing, not quite so broad, black, and sharply bent towards termen a short way below the costa; a strong, wavy, ochreous-green, sub-terminal line; a fairly broad, brighter-green terminal band and a terminal series of black scallops; cilia deep-brown with a broad basal black line, a strong black sub-terminal line, and occasionally faintly barred with black on tips of scallops. Hind-wings ochreous, deeper towards termen; dorsum with numerous wavy black lines becoming very faint towards disc. *Termen deeply scalloped* and strongly outlined in black; cilia deep-ochreous tinged with pink towards dorsum and faintly barred at the apices of the scallops with black.

Taken flying in the late afternoon, Lake Gunn, Eglinton Valley, December, 1944. Coll. J.T.S. Type in the Dominion Museum Collection. A rather worn Paratype from the same locality in the collection of Mr. T. M. Smith of Dunedin.

Declana callista n. sp.

Plate 1. Fig. 1.

Head very hairy, grey. Thorax also grey, *with very conspicuous anterior transverse crest of long, jet-black hairs, and two very conspicuous tufts of long, jet-black hairs cover most of anterior portion of thorax*. Antennae with moderately short pectinations, about 3. Abdomen warm orange-brown, with finely marked, black, segmental divisions and an



J. T. Salmon, Photo.

PLATE 1.

- Fig 1. *Declana callista* n. sp.
 Figs. 2 & 3. *Ichneutica notata* n. sp.
 Fig. 4. *Chloroclystis lacustris* Meyr., female.
 Figs. 5 & 10. *Euxoa admirationis* Guen. var. *obscura* nov.
 Fig. 6. *Tauroscopa eximia* n. sp.
 Figs. 7 & 8. *Chrysophanus boldenarum* subsp. *ianthina* nov.
 Fig 9. *Scoparia monochroma* n. sp.
 Fig. 11. *Hydriomena venustatis* n. sp.
 Figs. 12 & 13. *Chrysophanus boldenarum* subsp. *caerulea* nov.
 Fig. 14. *Scoparia crepuscula* n. sp.

All Figs. natural size.

extensive white oval tuft. The expanse of the wings of the male is about 38 mm. The forewings are oblong, moderately broad, with the costa strongly arched close to base, thence very faintly curved to apex; the termen is distinctly bowed with its edges scalloped between each vein; basal two-thirds of forewings cream-coloured, densely speckled with very pale brownish-ochreous; a very short obscure blackish basal streak, basal transverse line brownish, much suffused, a cloudy black median transverse line, with strong outward angulation in disc, and several minor angulations above and below this; a very strongly-waved second line, with three rounded projections towards termen, first below costa, second about middle, and third on dorsum near tornus; *the second line, which is unusually definite, consists of three portions: (1) a fine warm orange-brown line nearest base with short irregular projections where intersected by veins; (2) a slightly wider central line, almost white; (3) a very wide oblique heavy black band nearly touching apex on costa, and touching dorsum at about three-quarters; beyond this there is a wavy transverse series of seven large whitish spots, their outer margins forming an indefinite subterminal line, not quite reaching apex; veins strongly marked in black and shaded in brown across their subterminal area; a series of black terminal crescentic marks. Cilia blackish-brown, barred with black and finely tipped with pale straw colour. Hind wings moderate with termen slightly waved; pale whitish-ochreous with very pale blackish terminal shading and a subterminal series of slightly darker blackish spots; a large cloudy blackish blotch near middle of dorsum and a much smaller spot above this. Cilia grey, tipped with whitish.*

Taken from Hebe flowers in the Gertrude Cirque, Homer, about 1 a.m., 29th December, 1943. Coll. J.T.S.

Type: Male, in the Dominion Museum Collection.

Tauroscopa eximia n. sp.

Plate 1. Fig. 6.

Body jet-black with head and thorax very heavily clothed with long black hairs. Palpi protruding considerably and also very heavily clothed with long black hairs; antennae distinctly scalloped on basal two-thirds, plain on apical third. Abdomen only lightly haired, but with two prominent black anal tufts. Expansion of wings is 25 mm. *Forewings jet-black* with no markings whatever except for an irregular light mottling of silvery-grey and gold scales, and a faint suggestion of second line most obvious near costa. Cilia black on basal half and dark-brown on distal

half. *Hind wings white with broad black border* running around costa and termen to tornus; dorsum with broad band of lighter brown shading passing into black at base; a short, thin, diagonal black line extending out from base about one-quarter way to termen. Cilia on apex with basal third black, remainder brown but towards tornus with tips becoming white until whole of apical two-thirds is white; cilia of dorsum long, black on base, varying to white on tornus.

Taken in the late afternoon flying among stones, 3,500', Homer Cirque, December, 1944. Coll. J.T.S.

Type, female, in the Dominion Museum Collection.

Scoparia crepuscula n. sp.

Plate 1. Fig. 14.

Head and thorax dark ochreous lightly speckled with silvery white; thorax, in front overlaid with dark grey and white scales, behind with a silvery white patch. Antennae simple; palpi dark grey speckled with whitish. Abdomen silvery ochreous with segments 2-5 shaded dorsally with alternate bands of orange and dark greyish-brown; a suggestion of orange shading on the tip of the abdomen. The expansion of the wings is 30 mm. Forewings dark greyish-brown, very slightly iridescent, some silvery white and greenish shading medially; *reniform, orbicular and claviform silvery white heavily outlined with black, the reniform cross shaped; orbicular elliptical with a strong basal projection towards the termen; claviform circular; veins from base to subterminal line picked out in yellowish-ochreous, beyond subterminal line shaded with black; basal and first lines silvery white, basal line incomplete, first line zig-zag and shaded with black along outer edge; second line greyish white, broad, dropping abruptly from costa for a short distance, then sweeping outward towards termen and downwards towards dorsum which it meets abruptly at right angles after a further short sharp downward turn; a white flash with some irregular dark shading above it where second line meets tornus; a faint irregular, whitish, subterminal line runs from a similar faint, apical patch to meet the second line just above its middle after which it zig-zags outwards towards the tornus; this line is sometimes reduced to an apical patch; cilia brown basally, brownish ochreous distally, barred with brown. Hind wings brownish ochreous, slightly iridescent, with darker shading around termen; veins picked out in darker brown; cilia brown basally, brownish ochreous distally.*

Locality: Arthur River, Milford Sound, mid-December 1944, and mid-January, 1946—fairly common; taken at light in early evening. Coll. J.T.S.

Type and Paratypes in Dominion Museum Collection.

Scoparia monochroma n. sp.

Plate 1. Fig. 9.

Head and face ochreous speckled with silvery white; thorax and abdomen silvery white with deep orange shading across abdominal segment 2-4; tip of abdomen faintly tinged with orange. Antennae simple, dark brown barred with silver. Palpi silvery white. The expansion of the wings is 30 mm. Forewings greyish ochreous evenly speckled from base to subterminal line with silvery white scales; subterminal line only very faintly indicated; *reniform*, *orbicular* and *claviform* silvery white outlined in black shaded lightly on the edges with yellowish; *reniform* figure-eight shaped with the black obsolete above and below; *orbicular* kidney-shaped with the black tending to obsolescence above; *claviform* round to elliptical, complete; except for a terminal row of black dots all other markings obsolete; cilia ochreous-grey banded basally with dark grey and barred with dark brown. Hind wings slightly iridescent, dark greyish-ochreous with the veins outlined in darker shade; cilia ochreous banded basally with darker ochreous.

Locality: Arthur River, Milford Sound, taken at light in early evening; mid-December, 1944 and mid-January 1946, common. Coll. J.T.S.

Types and Paratypes in Dominion Museum Collection.

This and the preceding species are closely related but appear to be quite distinct. At first sight I thought they were male and female of the same species but this is not the case. Their nearest related species would be *Scoparia tetracycla* Meyr. but they differ from this species in size, colour and detailed markings.

Porina fusca. Philp.

Plate 2.

Recent collections of this species made at the Homer by Messrs. G. Howes, T. M. Smith, and myself have indicated that the two species, *Porina fusca* Philpott and *Porina descendens* Hudson really are the one species.

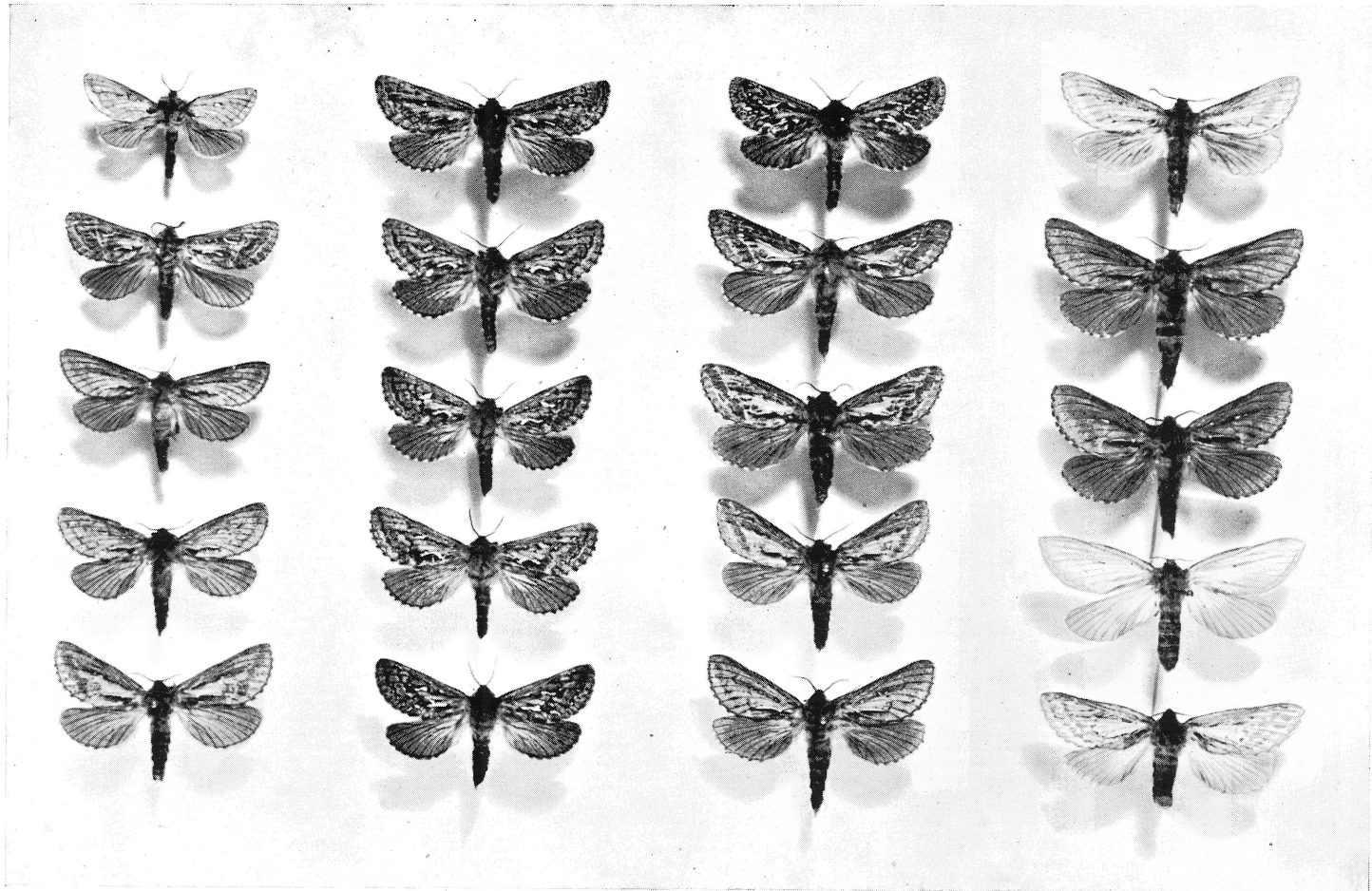


PLATE 2.

J. T. Salmon, Photo.

Porina fusca Philp. Series to show the variation from the *fusca* form on the left to the *descendens* form on the right. The two top left specimens are from Bold Peak, all the others are from the Homer. The two at the bottom right are females.

All Figs. natural size.

Porina descendens, therefore, becomes a synonym of *Porina fusca*. I collected quite extensive series of this species both at Homer Forks and lower down the Hollyford Valley at Monkey Flat. Those at the Homer tend towards the *descendens* variety and those at Monkey Flat towards the *fusca* variety, but in each series there is an overlapping towards the other form. This suggests that there is a tendency to vary towards the *descendens* form at higher altitudes. Plate 2 shows a number of male specimens arranged to show the trend in variation from the *fusca* form on the left to the *descendens* form on the right. The bottom two specimens on the right-hand column are females. Of the three specimens of males at the top of this column the lower two are interesting as they show the typical black band of *descendens* above the dorsum without the equally typical whitish-ochreous colouring of this variety. The top specimen is remarkable as it is a male with the colouring of a female. *P. fusca* flies in bright sunshine at the Homer from about 4 p.m. to 7 p.m. during the latter half of December and is very common. One of the females I collected was taken at light.

Chrysophanus boldenorum White.

Sub sp. *caerulea*. Plate 1. Figs. 12 and 13.

Sub sp. *ianthina*. Plate 1. Figs. 7 and 8.

These two new varieties of this pretty little butterfly were secured during recent visits to the Hollyford Valley and Milford Sound district. The form from the Hollyford has, in the male, both the fore and hind wings highly iridescent purple; a very broad black band along each termen and a further *inner band of brilliant caerulean blue* almost as broad as the black band, having its inner edge suffusing into the basal purple of the wings; second line very faintly indicated; veins towards the wing margins narrowly outlined with very deep ochreous, almost orange-coloured, scales; patches of similar coloured scales occur on tornus and at base of costa. Cilia of both wings long, white, barred with black. The expansion of the wings is 23 mm.

The female has the subterminal line of normally bright-purple spots on forewings continued as a similar line along hind wings, but both series are larger and broader than usual, and *very brilliant caerulean blue*. Except for the dark area along termen and dark second line, the remainder of the forewing is golden ochreous with veins faintly outlined in dusky shading. Hind wings are similarly coloured. Cilia as in male. The expansion of the wings is 24 mm.

The form from Milford has the female somewhat larger than usual. The male, brilliantly iridescent all over, both wings flashing with vivid violet colour when moved about. When held steady both wings are completely suffused with violet, *the veins and second line very heavily outlined with violet*; and spaces between veins are shaded with ochreous; subterminal purple spots almost completely replaced by a continuous violet line tinged on its outer edge, especially on the hind wings, with a very narrow streak of caerulean blue; a suggestion of terminal caerulean blue crescents on forewings. The expansion of the wings is 23 mm.

The female has ground colour of forewings a bright orange-ochreous. The hind wings are duller, being suffused with coppery brown, and clouded towards base with brown. Veins of both wings are very heavily outlined in black. A *continual subterminal narrow violet line* on forewing is continued on hind wing as a series of spots which are distinctly *blue*, not violet, outlined with black. An almost terminal series of brilliant caerulean blue crescents borders outer edge of subterminal black line of forewings. The expansion of the wings is 27 mm.

These two varieties are quite distinct from the other known forms of this butterfly. Though the Milford Sound form is rather like the Mount Arthur form it is larger and more heavily marked, especially along the veins. I think it would be advantageous to have the various forms of *boldenarum* named and I suggest therefore that the Hollyford Valley form be known as *C. boldenarum* subsp. *caerulea* n. subsp. and the Milford Sound form as *C. boldenarum* subsp. *ianthina* n. subsp.

Types in Dominion Museum Collection.