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A NEW SPECIES OF LIZARD (LACERTILIA: SCINCIDAE) FROM THE NORTHERN TERRITORY, CLOSELY ALLIED TO *CTENOTUS DECANEURUS* STORR.

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SUMMARY

A new species of *Ctenotus* is described. It is ecologically and morphologically distinct from *C. decaneurus,* its nearest congener. Current data suggest that it is restricted to coastal alluvial plains whereas *C. decaneurus* inhabits stony hill country.

INTRODUCTION

The genus *Ctenotus* (Storr, 1964) is large and widespread throughout continental Australia. Of the forty-six currently recognised species in the genus, twenty-nine have been described in recent years by Dr. Glen Storr in reviews of the genus in the western half of the continent (Storr 1969, 1970, 1971, 1974, 1975). Although the genus is already large, one can anticipate further additions, especially in eastern Australia.

The species described below was collected by the author in the Northern Territory in 1975. Initially two apparently distinct species of *Ctenotus,* readily separable under field conditions, both keyed out on morphological criteria to *Ctenotus decaneurus* (Storr, 1970). Further study revealed that *C. decaneurus* was described from material encompassing the two taxa, and that both have until now, been regarded as a single species.

The new member of this species-pair is described below, together with some limited information on its distribution and habitat preferences. In view of the fact that the status of *Ctenotus decaneurus* (*sensu* Storr 1970, 1975) is now changed, this latter species is re-defined and information provided on its habitat and distribution.

The new species is named in honour of Dr. Glen Storr in recognition of his contribution to our understanding of the taxonomy of the genus *Ctenotus*.

Ctenotus storri sp. nov.
Figs 1, 2, 3, 7

Ctenotus decaneurus (part) Storr, 1970, J. Proc. R. Soc. West. Aust., 52 (4): 104.

Ctenotus decaneurus (part) Storr, 1975, Rec. West. Aust. Mus., 3 (3): 234.

HOLOTYPE: R745 (formerly NTR 303), an adult female in the Australian National Wildlife Collection, C.S.I.R.O. Division of Wildlife Research, Canberra, A.C.T. Collected by J. Wombey, 23rd July, 1972 at Tapa Bay, Cox Peninsula, Northern Territory in Lat: 12°27'S, Long: 130°37'E.

Records of The Australian Museum, 1978, **Vol. 31, No. 10,** 395-409, Figures 1-7

PARATYPES: Australian National Wildlife Collection, Canberra, A.C.T. R746 (formerly NTR 233), R773 (formerly NTR 197), R774 (formerly NTR 227), R775 (formerly NTR 205) Berrimah, Darwin, Northern Territory in Lat: 12°25'S, Long: 130°55'E. Australian Museum, Sydney, N.S.W.: R51993, Adelaide River Township, Northern Territory in Lat: 13°05'S, Long: 131°06'E.

DIAGNOSIS: *Ctenotus storri* is a small member of the *taeniolatus* group of Storr[1], with a total of eight indistinct pale longitudinal body stripes, and no pale spots or flecks in the dorsal and lateral colour pattern. Distinguished from other members of the *taeniolatus* group by a broadly enlarged uppermost ear lobule. Further distinguished from *C. impar, C. dux, C. ariadnae,* and all subspecies of *C. quattuordecimlineatus* by fewer pale longitudinal body stripes. Separable from *C. decaneurus* generally by fewer pale body stripes, although *C. decaneurus* occasionally has only eight when the pale ventro-lateral is absent. Further diagnosed from *decaneurus* by having the pale paravertebral stripes coalescing for at least part of their length. Distinguished from *C. piankai* by the presence of a lighter stripe between the paravertebrals and dorso-lateral stripes, and from *C. taeniolatus* by the absence of a distinct broad black vertebral stripe extending for the full length of the body.

DESCRIPTION OF HOLOTYPE: SVL: 40.5 mm; Length of tail (original): 78 mm (192% of SVL); Length of forelimb: 10 mm (25% of SVL); Length of hindlimb: 18.5 mm (46% of SVL); Axilla-groin length: 21 mm (52% of SVL); Snout to anterior insertion of forelimb length: 13 mm (32% of SVL); Nasals in moderate contact; Prefrontals widely separated, Supraoculars 4/4, 3/3 in contact with frontal. Supraciliaries seven on left hand side, six on right hand side. Second loreal 1.1 times as wide as high. Supralabials 7/7. Ear lobules 3/3, all obtuse, uppermost on both sides broadly enlarged. Nuchals in four pairs. Midbody scale rows 25. Lamellae under fourth toe 21, each with a relatively narrow brown callus. Toe nails long and sabre-like (see Fig. 1).

Colour and pattern (in alcohol): Head and base colour of dorsum light brown. A total of eight pale dorsal and lateral stripes. An indistinct narrow, dark brown vertebral stripe beginning on nape, almost indiscernible at level of hindlimbs. Paravertebrals pale brown, wide, joining at about level of hindlimbs (when viewed from behind) and extending full length of tail. A pale brown longitudinal stripe between paravertebral and dorso-lateral stripes, beginning on parietals, terminating at base of tail, and separated from paravertebral by a dark brown intermediate zone. A narrow, pale brown dorso-lateral stripe beginning on outer edge of supraoculars and extending well on to tail, separated from dorsal stripes by a moderately wide dark brown to black stripe beginning on supraoculars and extending for about half length of tail. Upper lateral zone black, beginning on lores and extending for almost full length of tail. A distinct white unbroken temporal streak beginning posterior to eye and terminating anterior to ear aperture. A well defined white midlateral stripe, beginning on supralabials, looping over ear aperture and extending to hindlimb, uninterrupted by forelimb, and bordered below by a dark brown stripe beginning at ventral edge of ear aperture and extending to hindlimb. No ventro-lateral stripe. Ventral surface whitish. Limbs light brown striped longitudinally with dark brown.

VARIATION IN THE FIVE PARATYPES: Meristics and measurements are included in Table 1. In all specimens nasals in short to moderate contact and prefrontals widely separated. Supraoculars 4/4, 3/3 contacting the frontal in all cases except for ANWC R775 in which there are five on right hand side with four contacting the frontal. Uppermost ear lobule always broadly enlarged. Lamellae under fourth toe all with relatively narrow brown calli, toe nails long and sabre-like.

1. The *taeniolatus* group has never been formally defined (Storr, 1969, p. 98), nor has a list of the species contained in the group been published.

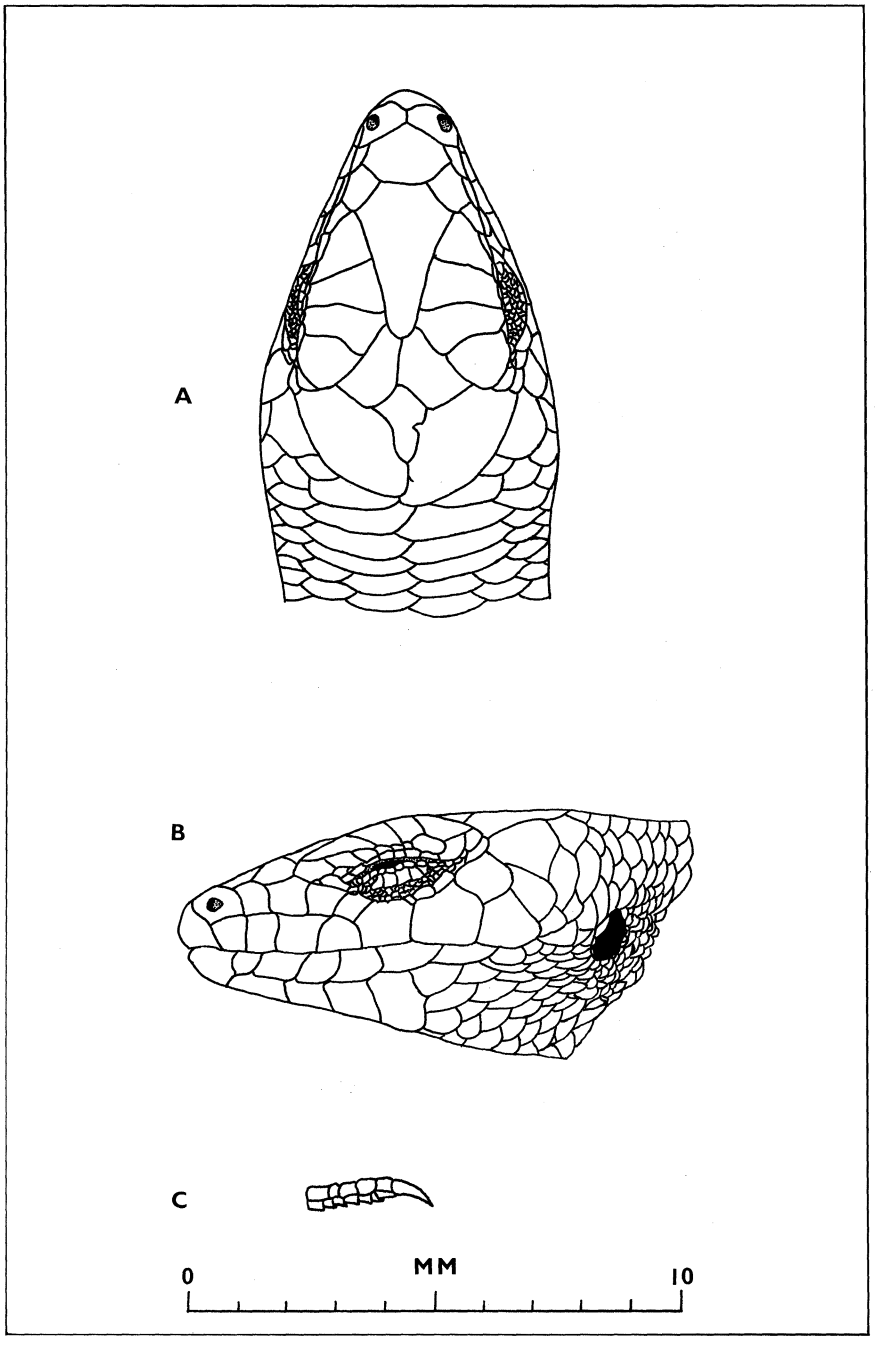

Fig. 1. Holotype of *Ctenotus storri* (ANWC R745). A. Dorsal aspect of head. B. Left lateral aspect of head. C. Lateral aspect of tip of fourth toe on left hind limb.

Colour and pattern (in alcohol): Generally similar to holotype, except that all specimens have more dark brown or black colouring on their heads. The juveniles have a tendency to have a more distinct dark vertebral stripe, and all of the series but ANWC R775 have broken but nevertheless distinct white temporal streaks. All are immaculate white ventrally.

OTHER SPECIMENS EXAMINED: A further two specimens in the Australian Museum collection were examined but their condition was too poor to qualify them for inclusion in the type series. These were R13005, from Darwin area, N.T., collected by V. R. Laird in 1944; and R56947 from Koongarra Mining Camp, Mt. Brockman Ra., N.T. in Lat: 12°53'S, Long: 132°50'E, collected by H. G. Cogger, February-March, 1973. No measurements or meristics were taken on the latter specimen, but those obtainable from R13005 are included in Table 1. The colour and pattern of both specimens is mainly bleached out, but clearly conforms to that of the type series.[2]

DISTRIBUTION: Probably restricted to plains associated with the coastal and near coastal regions of the north-western portion of the Northern Territory.

HABITAT AND ECOLOGY: The specimen AM R51993 was among five *C. storri* observed by the author at Adelaide River. Unfortunately, due to difficult collecting conditions, it was the only one secured. All were observed during the late mornings of the 15th-16th September, 1975 on the sandy alluvial plain between Mt. Carr and Adelaide River. Although the site was examined at varying times during the several visits to the area, *C. storri* was observed only during the one visit specified. At the time of this visit the area consisted of a secondary vegetation regrowth resulting from the original plant community having been cleared fairly recently. There were extensive areas of bare soil between the small clumps of young trees. All of the skinks were seen running actively across open spaces between the shade of trees, and those which escaped did so by diving down burrows in the soil. These burrows were presumably dug by the skinks themselves as they were of approximately the diameter of their bodies, and when pursued the lizards obviously knew where the burrows were. The narrow diameter of the burrows, as well as the fact that they plunged very steeply into the ground meant that effective excavation was almost impossible. It is of interest that the burrows were generally found in small pits in the ground such as hoof marks. Possibly such sites afford concealment of the burrow entrance, and/or permit the lizard to use a vertical surface into which it can dig easily. While being pursued the lizards did not run immediately to their burrows, but attempted to hide under clumps of grass and leaves before using the burrow.

Mr. J. Wombey kindly provided the author with the data sheets for the ANWC specimens, and the following information was obtained. All were taken in open coastal forest, and the data on the Tapa Bay specimen indicate that the soil type was sandy (the author has observed that the soil type around Berrimah is of a similar nature). All were active at the time of capture, and the actual times and dates of capture were: 1015 hrs, 26th October, 1971; 1030 hrs, 23rd July, 1972; 1040 hrs, 20th November, 1971; 1140 hrs, 2nd February, 1972; 1430 hrs, 20th February, 1972. These times compare closely with those observed by the author at Adelaide River. The specimen from Koongarra was collected in a flat sandy area of tropical woodland adjacent to the massive outcrops of Kombalgie sandstones in the Mt. Brockman region of the western escarpment of Arnhem Land (H. Cogger, pers. comm.).

It would seem probable on the basis of the above data that *C. storri* is associated with coastal woodland on sandy soils, and that it relies on burrowing as a form of protective cover.

2. See addendum.

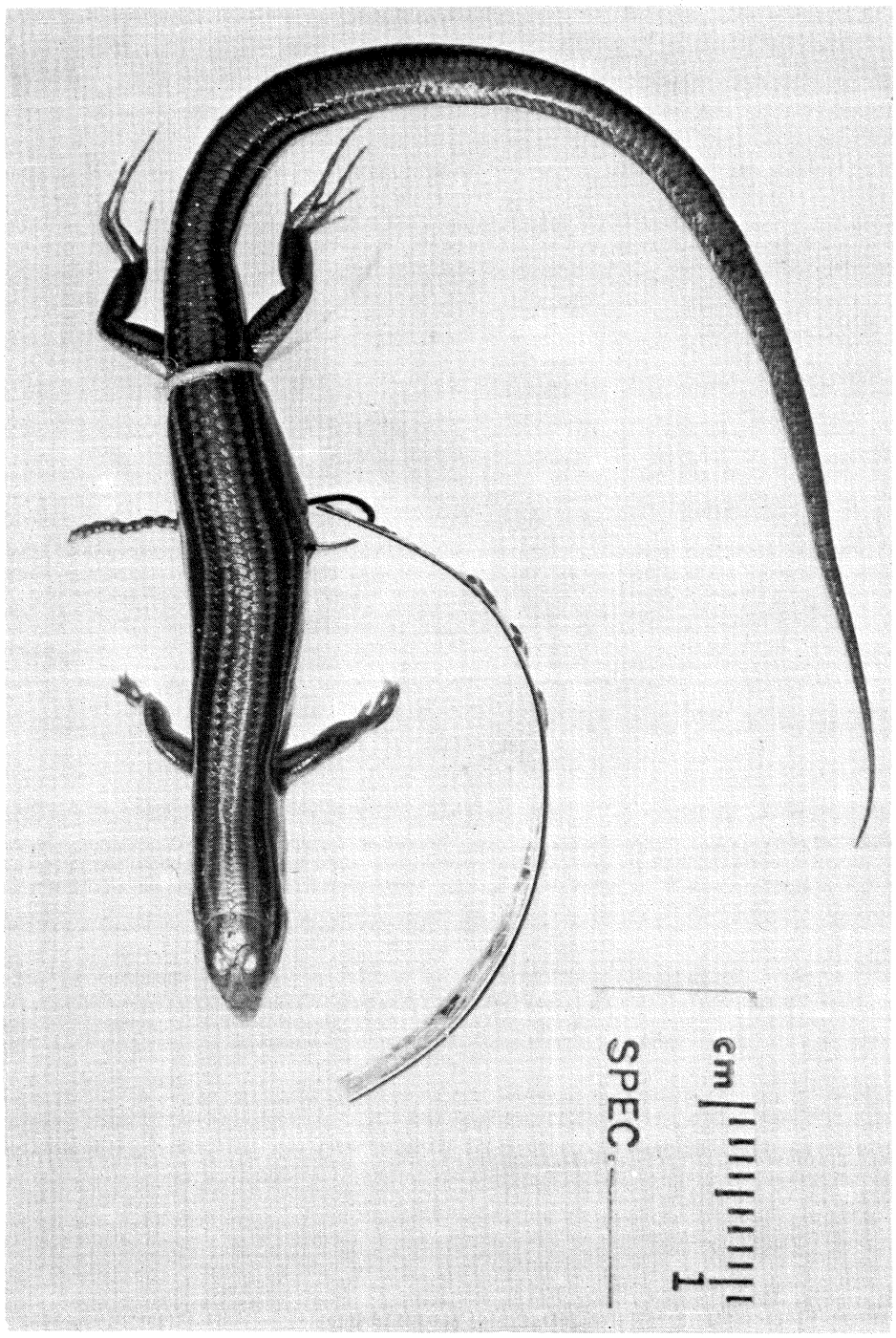

Fig. 2. Holotype of *Ctenotus storri*. (Photographed by G. Millen).

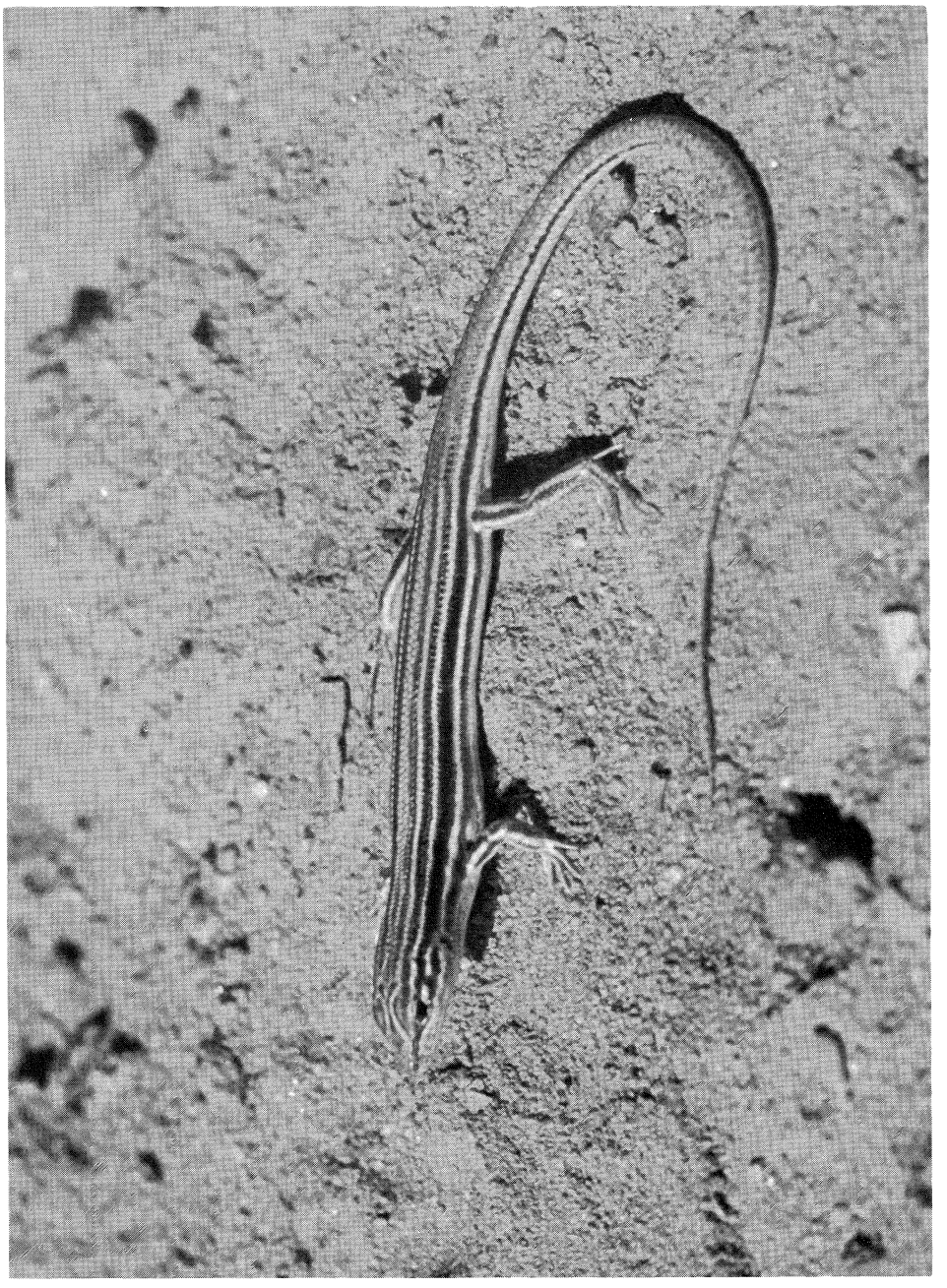

Fig. 3. A living specimen of *Ctenotus storri*, (AM R51993) from Adelaide River, N.T.

The 100 m contour (see map, Fig. 7) appears to be well correlated with the edge of the flat coastal areas in which the species has been collected and may be taken as an arbitrary limit upon the southern expansion of the species' range. At Adelaide River township, *Ctenotus essingtoni* was found by the author to be common and syntopic with *C. storri*, but seemed to prefer to burrow and hide under logs, rocks and rubbish rather than burrow or live in the open as appears to be the case with *C. storri*.

Ctenotus decaneurus decaneurus
Figs 4, 5, 6, 7

Ctenotus decaneurus (part) Storr 1970, J. Proc. R. Soc. West. Aust., 52 (4): 104.

Ctenotus decaneurus (part) Storr 1975, Rec. West. Aust. Mus., 3 (3): 234.

DIAGNOSIS: *Ctenotus decaneurus* is a small member of the *taeniolatus* species group with a total of 10 (8 when ventro-lateral missing) pale longitudinal body stripes and no pale spots or flecks in the dorsal and lateral pattern. Dinstinguished from all subspecies of *C. quattuordecimlineatus* and from *C. dux* and *C. ariadnae* by separated prefrontals and fewer pale longitudinal stripes, resulting in an absence of white upper lateral lines between white dorso-lateral and mid-lateral stripes. Distinguished from both subspecies of *C. piankai* by presence of a pale longitudinal stripe between paravertebrals and dorso-laterals, from *C. impar* by lack of pale vertebral stripe or pale temporal streak, from *C. taeniolatus* by absence of a broad light brown stripe between paravertebrals and dorso-laterals, and from *C. storri* by regularity of pattern (no stripes coalescing) and absence of broadly enlarged upper ear lobule.

VARIATION IN MATERIAL EXAMINED: Meristics and measurements are included in Table 1. The nasals contact in 10 (59%) of the 17 specimens examined, with the remainder having them moderately separated. In all but one of the specimens examined the prefrontals are widely separated (WAM R43526 has them in short contact) and there are 4/4 supraoculars with 3/3 contacting the frontal except for AM R51960 in which there are only 2/2 contacting the frontal. Toe nails moderately recurved (see Fig. 4).

Colour and pattern: The following description is based on a specimen in life. With respect to patterning, it conforms closely to Storr's (1970) description of the holotype. Base colour of dorsal surface of head coppery brown with black longitudinal blotches between the beginnings of pale body stripes. Supralabials grey with darker edges. Base colour of body black with 10 distinct pale stripes. The dorsal stripes are coppery brown anteriorly, merging to white posteriorly. The lateral stripes are white for their whole lengths. Base colour of the limbs off-white, striped longitudinally black. Soles of feet pink to light brown. Tail grey-brown striped with off-white. Venter immaculate white.

All but one of the specimens examined conformed closely to the colour description given by Storr, subject to changes in alcohol. The most obvious source of variation was in the presence or absence of a pale ventro-lateral stripe. This character was found to be lacking in only 4 (25%) of 16 specimens examined.

The only exception to the normal colour and pattern is WAM R50505. In alcohol, its colour and pattern is as follows: A total of 12 longitudinal white stripes around the body, including ventro-laterals and other normal stripes of *C. decaneurus*. The white stripe between paravertebral and dorso-lateral has another white stripe very close to and parallel to its outer margin. The dorsal stripes are all indistinct and irregular, the lateral stripes distinct and normal. More black on head than normal *C. decaneurus*. Supralabial stripe very distinct, beginning on first loreal and extending back over ear aperture. Pattern on tail more broken than in normal *C. decaneurus*. Whether or not this specimen represents an aberrant individual or a local variant is not clear.

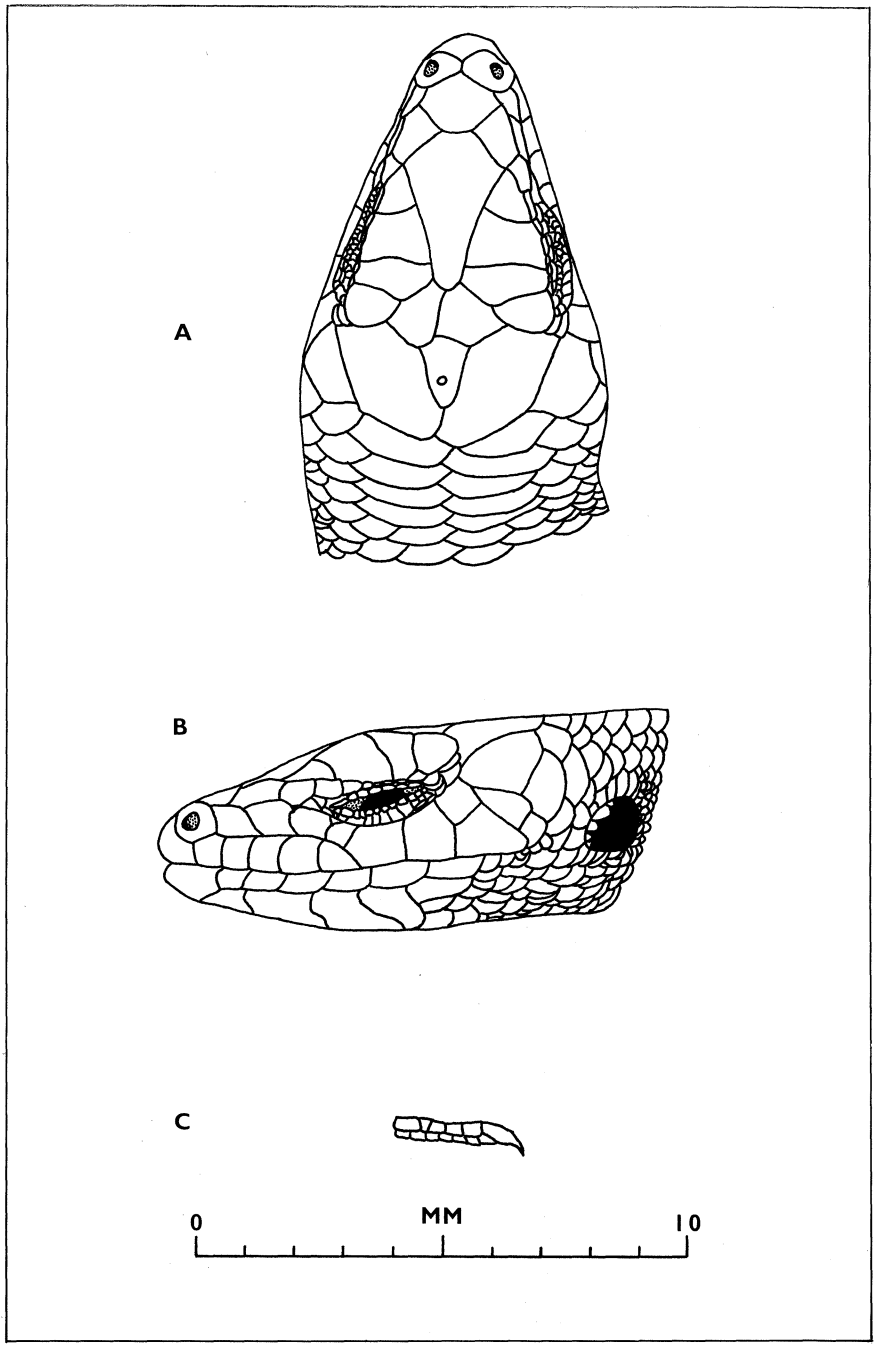

Fig. 4. Holotype of *Ctenotus decaneurus* (WAM R23130). A. Dorsal aspect of head. B. Left lateral aspect of head. C. Lateral aspect of tip of fourth toe on left hind limb.

Geographical variation: The specimens in the series from Mt. Carr (the only locality in the Northern Territory from which material is available) differ from the Western Australian material in the following respects. They all have separated nasals, 24 mid-body scale rows and shorter limbs. The western specimens all have contiguous nasals, and 26 mid-body scale rows. Of further possible significance is that all of the specimens lacking ventro-lateral stripes came from western populations. Whether any of these differences may be taken as indicators of an east-west cline remains to be seen when more specimens are available.

DISTRIBUTION: Probably restricted to the rocky hills of the north-western Northern Territory, and the north and north-east Kimberley region of Western Australia.

HABITAT AND ECOLOGY: The only locality where the author has seen this species is Mt. Carr, Adelaide River, Northern Territory. The habitat at this site consists of stony hills with very steep sides. The main rock type is conglomerate. The vegetation on Mt. Carr is essentially a deciduous broadleaf savanna woodland, and at the times of the author's visits (September-October 1975) there was very little live ground cover such as grass.

Three of the four specimens encountered by the author were on the very steep south-western aspect of the hill and the other, a juvenile, was on the relatively flat summit. All were active when discovered, and attempted to escape into rock crevices or under rocks loosely fitting on the ground. The dates and approximate times of collection of the specimens taken by the author and others present (P. Horner and G. Gow) were as follows: Mid-morning 25th September, 1975, one adult specimen; mid-day 2nd October, 1975, two specimens — one adult, one juvenile. A further example of the species was observed during the very late afternoon of 24th September.

None of the animals seen attempted to escape into a burrow. The hard stony soil would probably make burrow construction difficult and the presence of numerous rock crevices may negate the necessity of burrowing.

The melanistic colouring of the species (see Fig. 6) may contribute to effective thermoregulation (Parker, 1935).

MATERIAL EXAMINED: Where localities are not cited below, they have already been provided by Storr (1975). Western Australian Museum: R23130; R43152; R43162; R43188; R43247; R43526; R45559; R50505 Drysdale River National Park, W.A., in Lat: 14°48'S, Long: 126°57'E. Australian Museum: R45599 (formerly WAM R45596); R51960 Mt. Carr, Adelaide River, N.T. in Lat: 13°15'S, Long: 131°06'E. Northern Territory Museum, Darwin, N.T.: R1275-6, R2053-6 Mt. Carr, Adelaide River, N.T. in Lat 13°15'S, Long: 131°06'E. National Museum of Victoria: D41623 (formerly WAM R45595).

Ctenotus decaneurus yampiensis

Ctenotus decaneurus yampiensis Storr 1975, Rec. West. Aust. Mus., 3 (3): 235.

DIAGNOSIS: *C. d. yampiensis* is similar in most respects to *C. d. decaneurus* from which it may be distinguished by its higher number of mid-body scale rows (29-32).

COMMENT: Unfortunately, none of the type series was available for the author's examination (G. Storr, pers. comm.), but two other specimens not used in the description were examined. Their meristics and measurements are presented in Table 1. In both specimens the nasals are moderately separated, prefrontals are separate in one, and in short contact in the other (R11741). Supraoculars 4/4, 3/3 contacting the frontal in both specimens. Toe nails moderately recurved. The colour pattern appears to be identical to the nominate race.

MATERIAL EXAMINED: Western Australian Museum: Wotjulum, W.A., in Lat: 16°11'S, Long: 123°37'E (R11740-1).

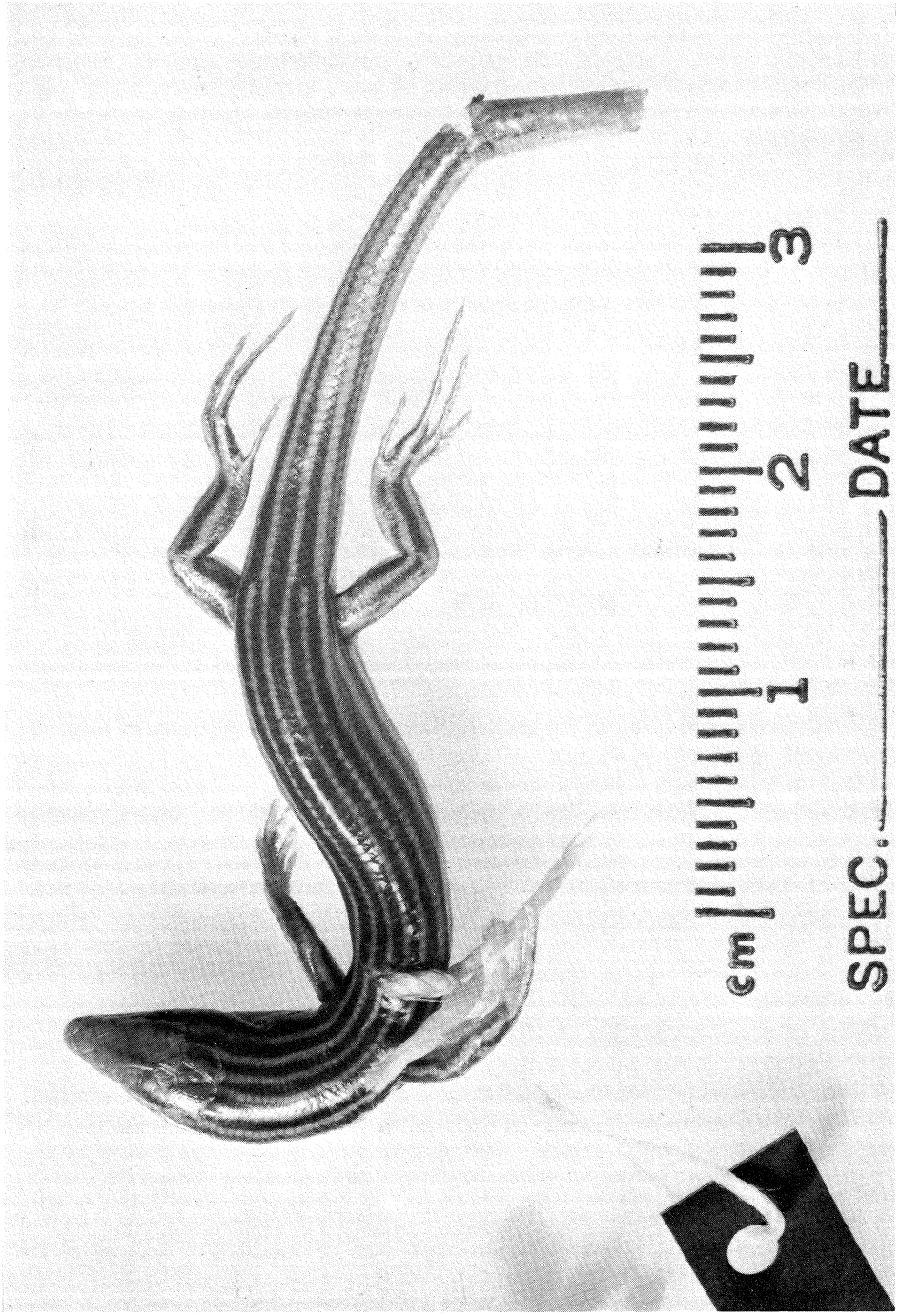

Fig. 5. Holotype of *Ctenotus decaneurus*. (Photographed by G. Millen).

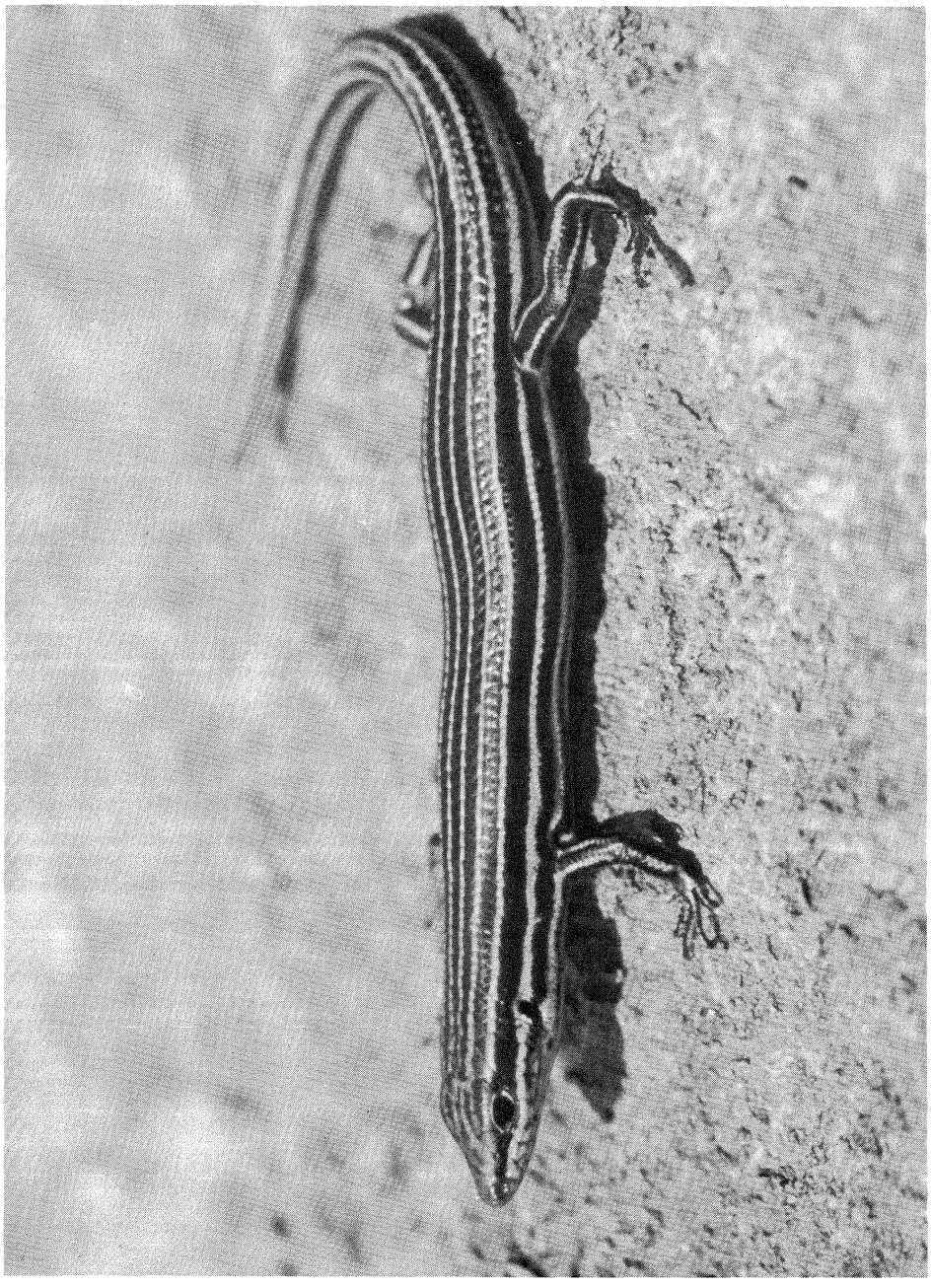

Fig. 6. A living specimen of *Ctenotus d. decaneurus* (NTM R1275) from Mt. Carr, Adelaide River, N.T.

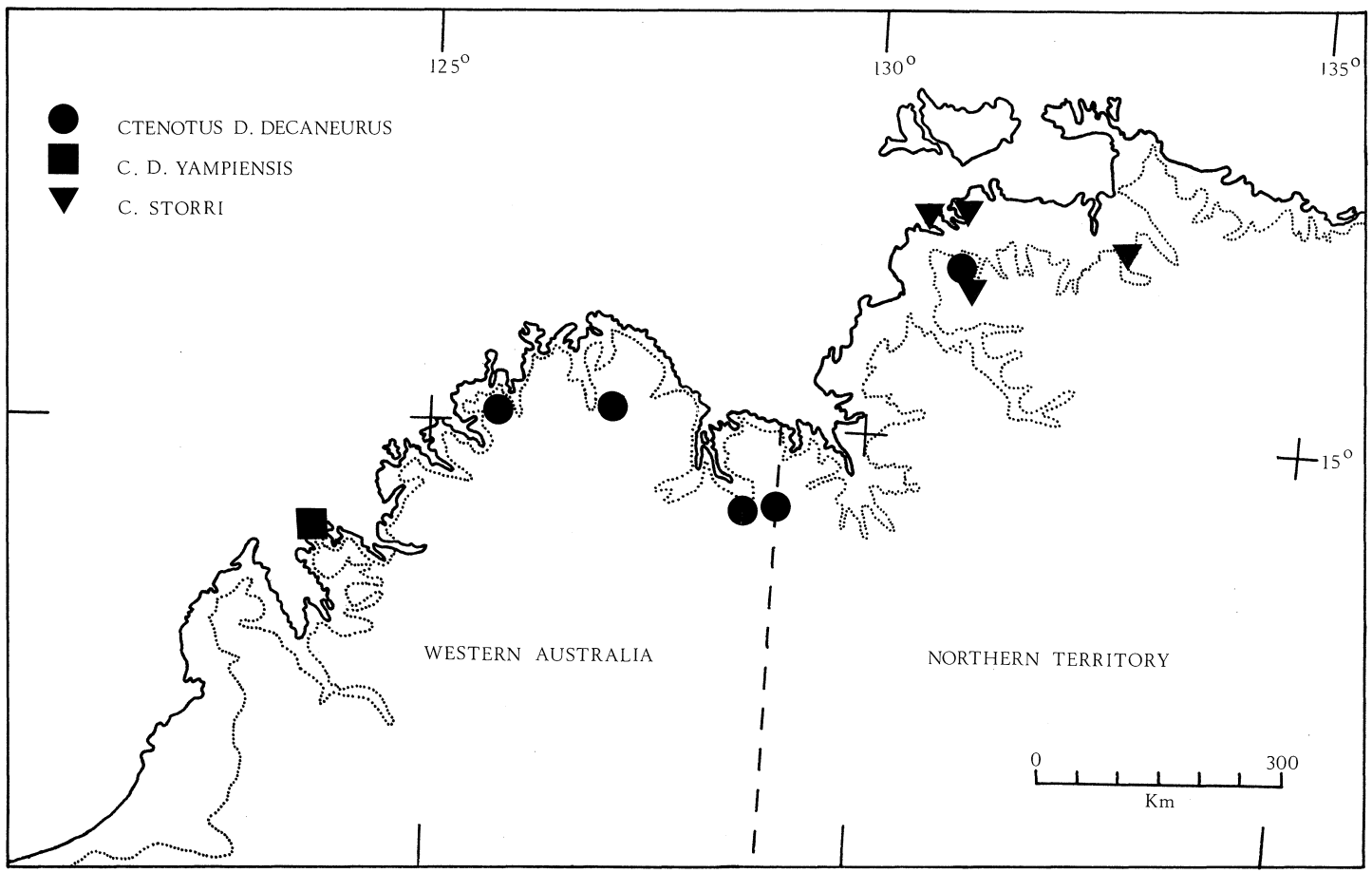

Fig. 7. Known localities of *Ctenotus storri, C. d. decaneurus,* and *C. d. yampiensis*. The dotted line represents the 100 metre contour.

DISCUSSION: The specimen AM R13005 was originally designated by Storr (1970) as the only paratype of *Ctenotus decaneurus*. It has been shown above that this specimen is not conspecific with the holotype. Storr (1975) subsequently mistook two other specimens of *C. storri* for *C. decaneurus*, ANWC R745 (formerly NTR 303) and ANWC R746 (formerly NTR 233). No mention was made in either of Storr's papers of any variation in colour pattern or scalation between the specimens now designated as *C. storri* and the holotype of *C. decaneurus* other than the enlarged upper ear lobules of *C. storri*.

The recent collection of specimens of *Ctenotus decaneurus* and *Ctenotus storri* with no intergradation less than one kilometre apart at Adelaide River, N.T. leaves little doubt that *C. storri* is not merely an eastern geographical form of *C. decaneurus*.

In *Ctenotus decaneurus* there is an increase in mid body scale rows, and length of appendages from East to West, with *C. d. yampiensis* representing an upper limit in these respects. The high values in appendage sizes of the Western Australian *C. d. decaneurus* material (see Table 1) are accounted for by the presence of a juvenile specimen which has relatively larger appendages than adults. The *C. d. yampiensis* population is the only one in the species' range presently known to exhibit variation in the number of mid body scale rows. It is of interest to note that the populations of *C. decaneurus* from the extreme east and west of the species' currently known range have a character in common which appears to be absent from the intervening populations, namely the separation of the nasals. A consequence of this is the loss of one diagnostic feature of *C. d. yampiensis*.

ACKNOWLEDGEMENTS

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REFERENCES

Parker, H. W. (1935) A new Melanic Lizard from Transjordania, and some Speculations concerning Melanism. Proc. Roy. Zool Soc. Lond., 1935 (1): 137-142.

Storr, G. M. (1964) *Ctenotus,* a new generic name for a group of Australian Skinks. W. Aust. Nat., 9 (4): 84-85.

Storr, G. M. (1969) The genus *Ctenotus* (Lacertilia, Scincidae), in the Eastern Division of Western Australia. J. Proc. R. Soc. West. Aust., 51 (4): 97-109.

Storr, G. M. (1970) The genus *Ctenotus* (Lacertilia, Scincidae), in the Northern Territory. J. Proc. R. Soc. West. Aust., 52 (4): 97-108.

Storr, G. M. (1971) The genus *Ctenotus* (Lacertilia, Scincidae), in South Australia. Rec. S. Aust. Mus., 16 (6): 1-15.

Storr, G. M. (1974) The genus *Ctenotus* (Lacertilia, Scincidae) in the South-west and Eucla Divisions of Western Australia. J. Proc. R. Soc. West. Aust., 56 (3): 86-93.

Storr, G. M. (1975) The genus *Ctenotus* (Lacertilia, Scincidae) in the Kimberley and North-west Divisions of Western Australia. Rec. West. Aust. Mus., 1975, 3 (3): 209-243.

Manuscript accepted for publication 17 March, 1977

Table 1: Variation in ranges of meristics and measurements of the species discussed in this paper, using all specimens available. Means are indicated in brackets. Measurements are expressed as percentages of SVL which is in mm. The figure in brackets in the number column (N) is the number of specimens with original tails.

	N	SVL	Tail	Fore-leg	Hind-leg	Axilla-groin	Snout-fore-limb	Mid-Body scale rows	Lamellae under 4th toe	Supra-ciliar-ies	Supra-labials	Ear lobul-es	Nuch-als
C. storri	*7 (4)*	21-40.5	175-192	25-35	45-52	46-53	32-42	24-26	21-24	6-8	6-7	1-5	4-3
		(30.2)	*(187.5)*	*(29.0)*	*(48.0)*	*(49.8)*	*(37.8)*	*(25.3)*	*(22.5)*	*(6.7)*	*(6.9)*	*(2.7)*	*(3.6)*
C. d. decaneurus		25.5-46	157-239	25-31	39.5-48	46-53	32-47	24	20-21	7-8	7-8	3-6	4
Mt. Carr series	7 (6)	(39.8)	(215.0)	(27.0)	(43.5)	(49.0)	(36.8)	(24.0)	(20.6)	(7.9)	(7.4)	(4.6)	(4)
C. d. decaneurus		*19-47*	*165-230*	*25-47*	*43-63*	*47-54*	*34-58*	*26*	*18-24*	*7-8*	*7-8*	*2-6*	*3-5*
W. A. Material	*10 (5)*	*(38.2)*	*(197.0)*	*(30.8)*	*(47.8)*	*(50.4)*	*(39.7)*	*(26.0)*	*(21.4)*	*(7.6)*	*(7.5)*	*(4.4)*	*(3.5)*
C. decaneurus		49-51	178	29-31	47-49	46-53	38	29-32	21-22	8	8	3-4	3-5
yampiensis	2 (1)	(50.0)	(178.0)	(30.0)	(48.0)	(49.5)	(38.0)	(30.5)	(21.5)	(8.0)	(8.0)	(3.8)	(3.8)

ADDENDUM

In January, 1977, the author collected a juvenile (SVL = 22 mm) *Ctenotus storri* at Mandorah, Cox Peninsula, N.T. in Latitude: 12°27'S; Longitude: 130°46'E. (Registration number: NTM R3125). This site is 15 km due East of Tapa Bay, the Type Locality. The habitat here is Tropical Layered Woodland interspersed with *Melaleuca* swamp and open grassy areas, adjoining an ocean beach.

The specimen was collected while active at 1130 hrs in an open grassy area during a short sunny break between heavy rain showers. In measurements and meristics, this juvenile is entirely within the ranges given for the species in Table 1; however, the colouring and patterning differ from those provided in the preceding description, and are described below.

COLOUR AND PATTERN (in life): Base colour of head and dorsum bright yellow. A total of eight pale dorsal and lateral stripes. A prominent black mid-frontal streak extending from frontoparietals to frontonasal. A distinct narrow black vertebral stripe beginning on nape and extending irregularly back the level of the hindlimbs. Paravertebrals bright yellow, narrow, beginning as one just anterior to the commencement of the vertebral stripe on the nape, joining at about the level of the hindlimbs, and extending down the tail (broken about half way along) where they are pale brown. A bright yellow longitudinal stripe between the paravertebral and dorso-lateral stripes, beginning on supraoculars and as extensions of yellow edge of black midfrontal streak, terminating at base of tail and separated from paravertebral by a black intermediate zone. A narrow, bright yellow dorso-lateral stripe beginning on outer edge of supraoculars and extending at least half way down tail, separated from dorsal stripes by a moderately wide black stripe beginning on supraoculars and extending for at least half the length of the tail. Upper lateral zone black, beginning on lores and extending for at least half the length of the tail. A distinct white unbroken temporal streak beginning posterior to the eye, extending to the ear aperture where it meets the mid-lateral stripe. A well-defined white mid-lateral stripe, beginning on supralabials, looping over ear aperture, and extending uninterrupted along the body on to the tail, for at least half its length, bordered below by a broad black stripe beginning at ventral edge of ear aperture and extending to hindlimb. Beginning of another black stripe which would enclose a pale ventro-lateral stripe below forelimb and extending posteriorly for about one third of the area from axilla to groin. Ventral surface immaculate white, excepting for underside of tail and limbs which are pink. Upper surface of limbs pale brown striped longitudinally dark brown to black.