## 85/3 NOTES ON LEGUMINOUS POISON-PLANTS OF SOUTH-WESTERN AUSTRALIA.

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ALBEADY on former occasions reference has been made in these pages to some poison-plants of the sub-order Podalyricae, notably species of Gastrolobium, Gxylobium, Gompholobium and Isotropis. At the instance of the writer of these lines, the foliage of Gastrolobium bilobum, one of the worst of the poison-bushes of Western Australia, was, in 1866, subjected to analysis by Dr. II. Fraas, in the famous chemical laboratory of Prof. Wittstein, of Munich. The results were published at the time (Ueber die Giftwiesen, pp. 19), but failed to throw light on the, at least under particular circumstances, highly deleterious effect exercised by these innocent-looking Leguninosae on pasture-animals. Whether possibly the

active principle—which evidently is not alkaloid, but possibly volatile-is to be sought in any bacterian organism (such as contained in the seeds of Abrus, and now known through the researches of Prof. Hilger to produce fermentive inflammation) or is traceable to some other as yet entirely obscure cause, requires still to be investigated. Researches in this direction should not only be carried out for the benefit of general toxicology, but also for special therapy. In the progress of settlement, even through the scrubby regions of Western Australia, the poison-bushes will likely become subdued also, whether it be by the steam-plough, followed by sowing of perennial grasses and fodder-herbs, or by mere mechanical grubbing, or by repeated burning; whether by the application of saline water from the sea or lagoons in proximity, or by the use of liquids from gas-factories, or by any other means. The number of poison-plants in the region indicated is considerable, and not all are of shrubby growth, the species of Isotropis being herbaceous. To the latter one more is added descriptively on this occasion, though it may not be deleterious, and will, on account of its rarity and smallness, not likely be dangerous. It comes from Central Australia.

Isotropis Winneckei.—Dwarf, much branched, closely appressed-hairy; leaves jointed to the slender and rather long stalk, lanceolar-oblong, above glabrous and concave or channelled; stipules and bracts narrow, semilanceolar; bracteoles almost linear, acute; racemes on comparatively short stalks, few-flowered; stalklets from hardly longer than the calyx to twice as long; the latter thinly silky-tomentose, its lobes not acuminated; petals when dry upwards violet-coloured, subtle-streaked, the upper petal somewhat longer than the others; anthers hardly three times as long as broad; ovary gradually attenuated into the short style; ovales about

ten; pod short-downy, narrow, long-pointed.
Towards Eyre's Creek; Ch. Winnecke, Esq.

This species approaches nearest to I. Wheeleri, but the leaves are broader and provided with longer stalks, the flowers are smaller with petals of darker colour, and the pods are more slender, resembling those of I. striata, but are longer-nointed than those of any congener.