

the shield is being scrutinised. Prof. Dey points out that three and half lakhs of cattle are being slaughtered annually in the various cities of the country and these may be easily utilised for the manufacture of glandular products like adrenaline, pituitary extract, liver principles, etc., etc. It may be noted, however, that these animals too would not offer more than 0.7 million suprarenal glands which on no account would afford more than 100 ounces of adrenaline powder. Further the type of animals that are generally being slaughtered, would not offer the maximum amount of physiological principles³ in question. Even the above maximum amount would not be sufficient for meeting the market already established for Liquor Adrenalin Hydrochloride of the manufacturing concern from which this note is being written. Similar question arises on the availability of sufficient amount of pituitary (posterior lobe) powder within the country. Liquid extract of liver is another product which can, of course, be easily prepared and in practice this is being largely produced too. The difficulty, however, again arises with the isolation and standardisation of an active liver principle that might be suitable for parenteral administration in Indian cases. Extensive physiological and clinical investigations would be necessary for finding out the necessity or utility of one or other liver principle in this tropical country. Here bullocks, oxen and cows are used for cultivation work. The children of the soil are mostly poor and vegetarian, or, at least not beef eating. Thus the social, geographical and climatic conditions prevailing act as a bar in the progress of large-scale manufacture of glandular products within the country. Many products like adrenaline, testosterone, desoxy corticosterone, synthetic oestrone-like substances of course are now being produced in other countries in artificial way; but their successful productions in India depend on various other factors which are well known to economic industrialists and/or scientific politicians.

As has already been mentioned by Dr. Mukerji certain Indian commercial concerns are producing medicament of requisite standard

from the materials that are already available in India. Unfortunately most of our scientists not in touch with Indian industrial concerns are unaware of this fact. It may, however, be stressed here that an all-cut drive and concerted efforts of the various scientists working in the different and divergent research institutions and industrial concerns of the country would have helped much in the production of still better, more and newer products. The spirit of such a concerted action is lacking and the existing firms apart from many other trade difficulties even suffer for want of facilities for clinical trials of their finished products in the authorised hospitals of the country.

U. P. BASU.

Bengal Immunity Research Laboratory,
Calcutta,
June 12, 1942.

¹ This Journal, 1942, 11, 110.

² *Ibid.*, p. 198.

³ Basu, Bose and Das Gupta, *Indian Med. Gazette*, 1940, 75, 215.

FATTY OIL FROM THE FRUIT OF *MARTYNIA DIANDRA* (N.O. PEDALIACEAE)

THE fat from the dried fruit of *Martynia Diandra* (Marathi: *Vinchu*; English: *Devil's Claw*; Hindi: *Bichu*) collected from the neighbourhood of Kolhapur, has been analysed and the results given below. The fat was extracted with carbon tetrachloride in a soxhlet.

Yield—20 per cent. (on the weight of the dried fruit).

Colour—Orange.

Smell—Nothing characteristic.

Specific gravity at 23° C.—0.9528.

Refractive index at 23° C.—1.4720.

Acid number—15.42.

Saponification value—195.3.

Iodine value—75.62.

Reichert-Meissel value—3.877.

Polenske number—0.7825.

Acetyl value—10.79.

Unaponifiable matter—0.86 per cent.

Rajaram College,
Kolhapur,
May 14, 1942.

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