

Published records of the range of *Bufo punctatus* report it from western Texas to southern California and Lower California.² It has also been reported from Utah³ and extreme southwestern Colorado.⁴ Ortenburger⁵ reports a single specimen from Comanche County, Oklahoma, which seems to have been the northernmost record east of the Continental Divide. So it would appear that the known range of *Bufo punctatus* east of the Rocky Mountains has been extended about a hundred miles to the north.

Bufo debilis, a near relative, has been recently discovered in the same locality,⁶ which makes the occurrence of this species less extraordinary than it would have been otherwise.

The measurements of the Kansas specimen (*Kansas Univ. Mus. Nat. Hist.*, No. 9100) are given below. They are quite average for specimens of *punctatus* from Texas and New Mexico.

Total length	51 mm
Length of head	11 mm
Width of head	21 mm
Length of hind leg	40 mm
Length of foot	30 mm
Least interorbital width	7 mm
Width of parotoid gland	6.5 mm
Length of parotoid gland	5.5 mm

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DO PEANUT OR ARACHIS NUT FED HOGS YIELD LARDS CONTAINING ARACHIDIC ACID

SOLTSIEN¹ states that lard from hogs fed on cottonseed meal gives a reaction for cottonseed oil as if 25 per cent. of it were present; the milk of cows fed on cottonseed also gives the reaction for the oil.² In a similar way Sesame oil transmits its familiar color reactions to lard and butter.³

In as much as the compounds producing the reactions passed unchanged through the animal economy, the question arose as to whether the characteristic glyceryl arachidate of peanut oil would show in lard made from hogs fed on peanuts.

² L. Stejneger and T. Barbour, "Check List of North American Amphibians and Reptiles," *Harvard Press*, 1923.

³ V. M. Tanner, *Copeia* 166: 25, 1928.

⁴ M. M. Ellis and J. Henderson, *Univ. Colorado Studies*, 1915.

⁵ A. I. Ortenburger, *Proc. Oklahoma Acad. Sci.*, 6: 92, 1926.

⁶ E. H. Taylor, *loc. cit.*

¹ *Z. öffentl.*, Ch. I, 140, 1901.

² J. Wauters, *Soc. Chem. Ind.*, 19, 172, 1900.

³ König and Z. Schluckebier, *Unt. Nahr. u. Genussm.*, 15, 642, 1908, and also Engel, *Z. ang. Chem.*, 268, 1906.

Five hundred grams of lard, obtained from a famous Virginia producer of hams made from peanut-fed hogs, were saponified and treated to obtain arachidic acid by the well-known method of Renaud modified by Tolman.⁴ The resulting fatty acids were changed to their methyl esters and distilled *in vacuo*. Two fractions were obtained, one on recrystallization gave an acid which melted at 61° corresponding to palmitic acid, and another an acid melting at 67°-69° indicating stearic acid. No trace of a high boiling methyl arachidate was found.

As to the reason for the different behavior of these oils, the color-giving compound in cottonseed oil is thought to be of aldehydic nature, while that in Sesame oil may be phenolic, both of low molecular weight, as compared with glyceryl arachidate (974).

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A MOTOR FOUND IN NATURE

SOME time ago, while sitting on the shore of a small lake, my attention was drawn to an object squirming in the water. A slender floating reed was turning over and over. My curiosity led me to withdraw the reed and to examine it carefully.

Apparently the reed had not grown straight but had assumed somewhat a cork-screw shape. It was quite accidental that, at the time I happened on the scene, one wave-length of the waves then running closely approximated the axial distance covered by one revolution of the screw-shaped reed. Since the latter was lightly held by obstructions so that it was forced to remain normal to the advancing wave-fronts, each wave, as it moved shorewards, gave the reed one complete revolution.

Here was a tiny motor. I decided to construct a larger one on the plan taught me by the reed. After having determined the dimensions of waves while a brisk wind was blowing on the lake, I gave an inflated five-inch automobile inner tube one turn about a long bamboo pole. (Note. The doughnut shaped tube was first cut through opposite the valve and the two ends of the extended tube were then closed.) To my delight, the motor, when in the water and anchored normal to the wave fronts, executed continuous rotation as the reed had done. It was interesting to note that, though the sea was rather violent, the motor maintained a constant level and an even keel for the action was that of a screw rather than that of a boat.

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⁴ Gill's "Oil Analysis," p. 203.