

Number of plants	Nature of treatment	Grams of dry matter per plant	Nicotine	
			Per-centage	Grams per plant
3.....	Topped	170	2.75	4.68
5.....	Suckered	144	3.79	5.46
11.....	Topped and Suckered	124	4.40	5.46
5.....	Untreated	144	1.61	2.32

Close similarities were observed between the nicotine content of the leaves and stalks of the topped and suckered plants from the two localities as evidenced by the analysis of composite samples as given below:

Location	Percentage of Nicotine	
	In stalks	In leaves
Lancaster County	2.05	7.30
Clinton County	2.22	7.05

The weight of tobacco produced from an acre of *Nicotiana Rustica* grown in Clinton County in 1923 amounted to 4,500 pounds, slightly more than our results indicate, assuming 11,000 plants per acre. Owing to individual characteristics of plants one would not expect the weights of different plants to closely parallel one another. In every case, however, when the plant had been either topped or suckered the percentage of nicotine was very much higher than that of an untreated plant. These results are in more or less agreement with those obtained by Oosthuizen.⁴

According to Shedd and Olney⁵ nicotine can be readily extracted from tobacco wastes by steeping the material in cold water. Experiments conducted by us have substantiated their claim. We have found, however, that nicotine can be obtained more readily by treating the tobacco with cold water and bringing to a boil and filtering through cheesecloth immediately. A very few washings with hot water freed the residue of nicotine, while continued boiling of the sample was not so satisfactory. After the nicotine was extracted solutions were made up in concentrations varying from 0.06 to 0.2 per cent. nicotine. When mixed with a little soap these solutions were found to possess pronounced aphiscidal properties, comparable to the results obtained from the same concentrations of nicotine solutions made by diluting a standard 40 per cent. nicotine solution.

⁴ Oosthuizen, J. du P., "Tobacco cultivation for nicotine," Union of S. A., *Jour. Dep't. Agr.*, Vol. 6, No. 2, 1923, p. 173.

⁵ Shedd, O. M. and Olney, A. J., "The preparation from tobacco of a solution for spraying," Paper presented before the 67th meeting of the American Chemical Society, 1924.

Further studies relative to the utilization of *Nicotiana rustica* are being conducted by us at the present time.

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THE WESTERN PSYCHOLOGICAL ASSOCIATION

THE fourth annual meeting of the Western Psychological Association was held at Stanford University on August 8 and 9.

The officers for 1923-24 are as follows: Edmund S. Conklin, *president*, University of Oregon; Arthur H. Sutherland, *vice-president*, Los Angeles Schools; Walter R. Miles, *secretary-treasurer*, Stanford University; Calvin P. Stone, *local committeeman*, Stanford University.

The program was as follows:

Heredity, environment and mental achievement: TRUMAN L. KELLEY.

The geography of intelligence: RAYMOND FRANZEN.

Character and personality traits of gifted children: LEWIS M. TERMAN.

Intellectual factor in children's drawings: FLORENCE L. GOODENOUGH.

The validity of self-estimate: EUGENE SHEN.

The determiners of animal learning: EDWARD C. TOLMAN.

The problem of psychological set: PAUL THOMAS YOUNG.

Psychological systems in their relationship to selling: EDWARD K. STRONG, JR.

Description of eidetic phenomena: HEINRICH KLUVER.
A rotation table for laboratory animals: FRANKLIN S. FEARING.

Review of alcohol studies: WALTER R. MILES.

The classification of personalities: EDMUND S. CONKLIN.
Nervous and mental characteristics of Mongolian imbecility: KATE BROUSSEAU.

Freudian theory and sexual enlightenment: a study in resistances: CAVENDISH MOXON.

Intelligence tests of Los Angeles police force: ELLEN SULLIVAN AND GRACE FERNALD.

Some results on the development of mental control: A. H. SUTHERLAND.

Congenital behavior following cerebral lesions in rabbits: CALVIN P. STONE.

Psychological research in state institutions: FRED NELLES.

Educational achievement of children with personality and behavior difficulties: PHYLLIS BLANCHARD, RALPH P. TRUITT AND RICHARD H. PAYNTER, JR.

The analytical vs. the general diagnosis in clinical psychology: LIGHTNER WITMER.

The new type of functionalism: WALTER B. PILLSBURY.