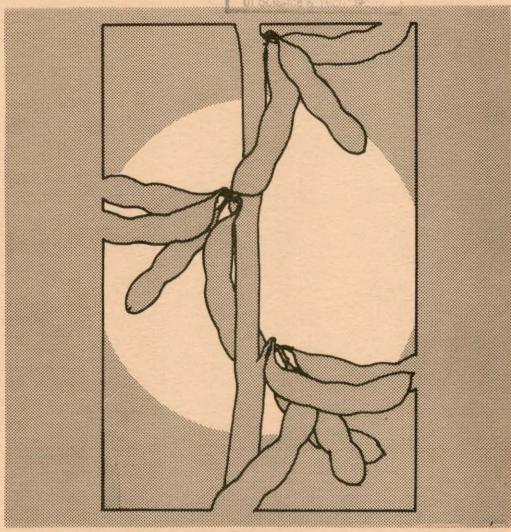
Soybean Genetics Newsletter AUG 20 1986

t.b



Volume 12

April 1985

The data presented here are not to be used in publications without the consent of the respective authors.

Agricultural Research Service-USDA

Department of Agronomy
and
Department of Genetics
lowa State University
Ames, Iowa 50011

TABLE OF CONTENTS

	I I	page
I.	FOREWORD	1
II.	ANNOUNCEMENTS	2
III.	SOYBEAN GENETICS COMMITTEE REPORT	4
IV.	SOYBEAN GERMPLASM ADVISORY COMMITTEE	10
v.	U.S. NORTHERN SOYBEAN GERMPLASM COLLECTION REPORT	13
VI.	COMMERCIAL SOYBEAN BREEDERS BOARD - 1985	15
VII.	CURRENT AND OBSOLETE GENE SYMBOLS FOR ISOZYMES AND PROTEIN VARIANTS IN SOYBEAN	16
VIII.	RESEARCH NOTES	
	Canada Flecked pigmentation of soybean seed coats. R. I. Buzzell	29
	Soybean linkage group 1 tests. R. I. Buzzell and R. G. Palmer .	32
	India Environmental impact on different characteristics of soybean.	
	B. K. Konwar and P. Talukdar	35
	Intra-plant variation in mutation frequency and spectrum in soybean. H. D. Upadhyaya, B. B. Singh and K. P. S. Chauhan	39
	Induced variability for quantitative characters. H. D. Upadhyaya	44
	A narrow leaf type soybean variety - PK-308. H. H. Ram, K. Singh, Pushpendra and V. D. Verma	49
	Retention of impermeability and viability of soybean seeds under water submergence. N. D. Rana	53
	Poland Analysis of variation and relationship between soybean traits in F ₃ and F ₄ in two cross combinations. H. Skorupska and G. Konieczny	59
	Osmia rufa L. (Apoidea, Megalichiae) - A potential pollenator in the subgenus Glycine. H. Skorupska and Z. Wilkaniec	64
	Thailand Observation on back mutation of white-flowered 'Wakashima' mutants. S. Smutkupt, A. Wongpiyasatid and S. Lamseejan	67
	United States Influence of genotype and growth stage on nitrogen fixation in soybeans. E. R. Garner, V. T. Sapra and McA. Floyd	71
	The genomes of the genus Glycine. R. J. Singh and T. Hymowitz .	76
	Screening progeny of mutagen-treated soybean seeds for nonfluo- rescent root mutants. R. G. Palmer, J. D. Schillinger and	
	T. Howson	77

	Genetic studies with two mutagen-induced nonfluorescent root mutants. R. G. Palmer, M. O. McFerson and S. Yost 82
	Nucleolus distribution in quartets from diploid and triploid soybean. L. F. Chen and R. G. Palmer
	Screening soybean genotypes for iron-deficiency chlorosis in the growth chamber using potted soil. D. J. Fairbanks and J. H. Orf
	SG1 - A recently constructed random-mated soybean population possessing the ms_2 gene for genetic male sterility. J. E. Specht and J. H. Williams
	Heterosis performance and combining ability in soybeans. T. Kunta, L. H. Edwards, R. W. McNew and R. Dinkins 97
	Combining ability for seed protein and oil content in soybeans. M. Y. Sabbouh and L. H. Edwards
	The effect of the narrow-leaf gene in a segregating population. R. D. Dinkins, L. H. Edwards, R. W. McNew and T. Kunta 101
	U.S.S.R. Subunit composition of glycinin from various samples of cultivated and wild soybean. A. Y. Alexenko, V. I. Sichkar, E. A. Timokhina, A. A. Musatova and Y. P. Vinetsky
	Zambia Development of promiscuous soybean varieties. J. M. Joshi, F. Javaheri and S. Nkumbula
IX.	INDEX OF AUTHORS
XI.	MAILING LIST

I. FOREWORD

The contents of this issue of the Soybean Genetics Newsletter covers a wide variety of special aspects of soybean research. Your attention is called especially to the reports of the germplasm advisory committee, and the report of the northern soybean germplasm collection. The burgeoning, in the field of soybean research, of the relatively new science of electrophoresis has necessitated a reappraisal of rules of nomenclature, and even a renaming of some of the genes whose existence has been verified by electrophoresis. This year, the soybean genetics committee discussed and decided on changes in nomenclature. Their report is to be found in this issue, with the rule changes underlined.

Graduate students and technicians who volunteered (or were drafted) to help in the assembly and publication of Volume 12 of the Soybean Genetics Newsletter are: Lon-Fang O. Chen, Jeff Griffin, Peggy Hatfield, Brad Hedges, Huang Jintai, Phyllis Tyrrell, Diane Stevermer, Cyndi Lee, Duane Garien, Peggy Thorson, Mary McFerson, Holly Heer and Susan Yost. It would be a mighty thin volume without their help.

Reid G. Palmer, editor

The data presented in the Soybean Genetics Newsletter are not to be used in publications without the consent of the respective authors.

Mention of a trademark or proprietary product by the USDA or Iowa State University does not imply its approval to the exclusion of other products that may also be suitable.