

APPLIED RESEARCH-IV
AGRISCIENCE CURRICULUM

AXEL ALRIANDRO A: PINPIN

Don Severino Agricultural College Indang, Cavite

March 1988

GERMINATION OF SCARIFIED LANZONES SEEDS TO DIFFERENT GERMINATING MEDIA

AXEL ALEJANDRO A. PINPIN

Submitted to the Faculty of the Agricultural Science
Department, Don Severino Agricultural College
Indang, Cavite in partial fulfillment
of the requirements in

Applied Research - IV
(Agri-Science Curriculum)

Germination of scarified lanzones seeds to different germinating media 634 P65 1988 R-37

March 1988

ABSTRACT

PINPIN, AXEL ALEJANDRO A., Applied Research IV (Agri-Science Curriculum), Don Severino Agricultural College, Indang, Cavite, March 1988, GERMINATION OF SCARIFIED LANZONES SEEDS TO DIFFERENT GERMINATING MEDIA.

Adviser: Mr. Alejandro C. Mojica

The study entitled "Germination of Scarified Lanzones Seeds to Different Germinating Media" was conducted at DSAC's Nursery, Indang, Cavite for a period of three months starting from November 3, 1987 to January 31, 1988 to determine if there is an interaction effect between germinating media and seed scarification in the germination of lanzones seeds.

This study was a two-factorial experiment in a split-plot design using scarification treatment as main plot and germinating media as sub-plot. Each of the factor has four treatments replicated three times. A total of four hundred eighty (480) seeds was used in the experiment.

Significant results were obtained in percentage germination, seedling height and number of leaves. A highly significant result was observed in the interaction of scarification and germinating media in relation to seedling height and number of leaves.

The study proved that 50% coconut bark and 50% soil was the best germinating media for lanzones. However, the use of scarification methods in lanzones seeds for its germination is also recommended that further experiment must be conducted along this line.

TABLE OF CONTENTS

												-1						Page
BIOGRAPH	HICAL	DATA	A	•		•	•	•	٥	٠	•		•		•	۰	•	iii
ACKNOWL	EDGEME	ENT		•	n e	•	•	•	•	•	•	•	•	•	•		•	iv
ABSTRACT	P .		•	•		•	•	•	•	•	•	•	•	•	•	•	•	vi
LIST OF	TABLE	ES .	•	•		0	•	•	•	•	•	•	•		•	•	•	x
LIST OF	APPEN	IDIX	TA	BL	ES	•	•	•		•	•	•	•	•	•	•	•	хi
LIST OF	FIGUE	RES	•	•	• •	•	•	•	•	•	•	•	•	•	•	•	•	xii
INTE	RODUCI	CION	•	•		•	0	•	•	•	•	•	•	•	•	•	•	- 1
	Impor	tano	е	of	the	e S	tu	dy		•	•	•	•	۰	•	0	•	1
	State	ement	0	ft	the	Pr	ob	le	m	•	•	6	•	•	•	•	•	2
	Objec	tive	es	of	the	e s	tu	dy		•	•	•	•	•	•	۰	•	2
	Time	and	Pl	ace	0 :	f t	he	S	tu	dy		•	•	•	•	•	•	2
REVI	EW OF	REI	AT	ED	LI	PER	PAT	UR:	E	,		•	•	•	•	0	•	3
	Germi	nati	.on	οí	: la	anz	on	es	9	•		•	0	•	•	•	•	3
	Germi	nati	.on	Pr	como	ote	rs	aı	nd	Ir	nh:	i.b:	it	or	`s	•	•	3
	Seeds	Sca	ri	fic	ati	Lon		•	•	•	•		۰	•	•		•	4
MATE	RIALS	ANI) M	ETF	HODS	5		•			•	•	•	•		•	•	5
	Mat	eria	ls					•	•	•	٠	•	•		•	•	•	5
	Met	hods	3	•	• •		•	•	6	•	0	•		•	•	•		5
	Pr	ocur	eme	ent	o i	S	ee	ds	•		•	•	•	0	•	•	•	5
	Pr	epar	at	ion	of	S	ee	ds		0 0	•	•	•	•	٥	0	•	5
	Pr	epar	at	ion	oí	S	c a:	ri	fyi	Lnę	s l	Ma	te	ri	al	s	0	6
	Pr	epar	at	ion	oí	G	er	mir	nat	tir	ıg	M	ed	iu	.m	0	0	6
	Ex	peri	mei	nta	l I)es	ign	n		9 (•	0	0	e	0	0	0	6

																				Page
	Sca	ari	fic	cat	tio	on	0	f,	Se	ed	S	•	•	•	•	0.	•	•	•	7
	Pla	ant:	ing	g	ſ	Se	ee	ds		•	•	•	•	•	• .	0	•	٥	0	7
	Wa	ter:	ine	Š	•	0	•	•	•	۰	• 1	0	•	•	•	•	•	•	•	7
	Wee	edir	ng	•	•	•	٠	۰	0	0	0	•	•	•	•	0	•	۰	•	7
	Gat	thei	rin	ıg	01	f I	Da	ta			•	•	•	•	•		۰	•	•	7
DISCUSS	ION	OF	RE	SU	LT	ľS		ø	•	•		•	•	•	•	•	•	•	•	9
Per	cent	tage	∋ G	er	imi	na	ati	Lor	1	•	•	•	•	0	٠	•	•	٠		9
See	dlir	ng F	Hei	gh	ıt		•	•	•	•	0	•	•	•	•	٠	•	•	•	12
Num	ber	of	Le	av	es	3	•	•	•	۰	•	•	•	•	•		•	•	•	14
Ste	m Di	lame	ete	r		•	•	e	•	•	•	•	•	•	•	•	•	•	•	16
SUMMARY	, cc	ONCI	LUS	IC	N	AN	ID	RI	ECC	MC	Æ	ID/	$\Gamma \Gamma P$	ON	1	•	0	•	•	18
Sum	nary	7	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	18
Con	clus	sion	1	•	•	•	9	•	•	٥	•		۰	•	•	•		•	•	19
Rec	omme	enda	ati	on		۰	•	•	۰	•	•	•	•	•	•	•		•	•	19
LITERAT	JRE	CIT	ED	1	•	•	•	•	•	٠			۰	•	•	•	•	•	•	22
APPENDI	CES		•		•	•	•	•	•	•	•	•	•	•	•			•		23

LIST OF TABLES

Table										Page
1	Percentage Germination .	•	•	•	•	•	•	•	•	10
2	Average Seedling Height .	•	•	0	0	•	•	•	•	13
3	Average Number of Leaves	•		•	•	•	•	•		15
4	Average Stem Diameter	•	۰	•	•	•	•	•	•	17

LIST OF APPENDIX TABLE

Appendix	Table	Page
1	Analysis of Variance Table on Percentage Germination	24
2	Analysis of Variance Table on Average Seedling Height	25
3	Analysis of Variance Table on Average Number of Leaves	26
4	Analysis of Variance Table on Average Stem Diameter	27

LIST OF FIGURES

Figures			12	Page
1	Experimental Field Layout	•	•	29
2	General View of the Experiment	•	•	30
3	The Author Measuring the Height of the Seedlings		•	31
4	A Sample of Seedling Produced by a Polyembryonic Seed			32

GERMINATION OF SCARIFIED LANZONES SEEDS TO DIFFERENT GERMINATING MEDIA 1/

by

Axel Alejandro A. Pinpin

A Thesis submitted to the Faculty of the Agricultural Science Curriculum, Don Severino Agricultural College, Indang, Cavite in partial fulfillment of the requirements in Applied Research IV. Contribution No. AR/CS______. Prepared under the supervision of Mr. Josefino A. Viado and Mr. Alejandro C. Mojica, Advisers.

INTRODUCTION

Importance of the Study

Lanzones is more popularly known as Langsat in some other Southeast Asian countries. Lanzones is botanically known as Lansium domesticum Correa. It belongs to the family Meliacea which is composed of over 400 genera and 600 species. It is confined in the tropical regions.

It is considered as one of the very popular seasonal fruit grown in the Philippines. The milky juice which is found in the skin of the fruit and the bitter seeds seems to deter many people from outside the tropic s from eating lanzones. It is one excellent dessert fruit that a person does not seem to get tired