

Structure and procedure of writing a thesis for SAU

Mirza Hasanuzzaman

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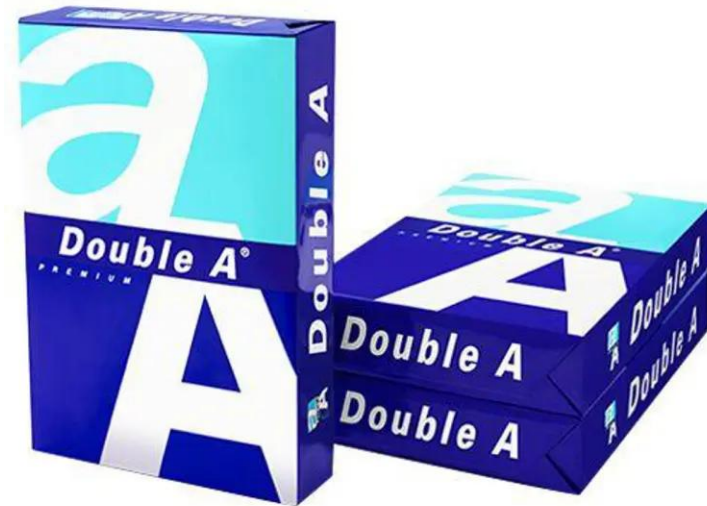
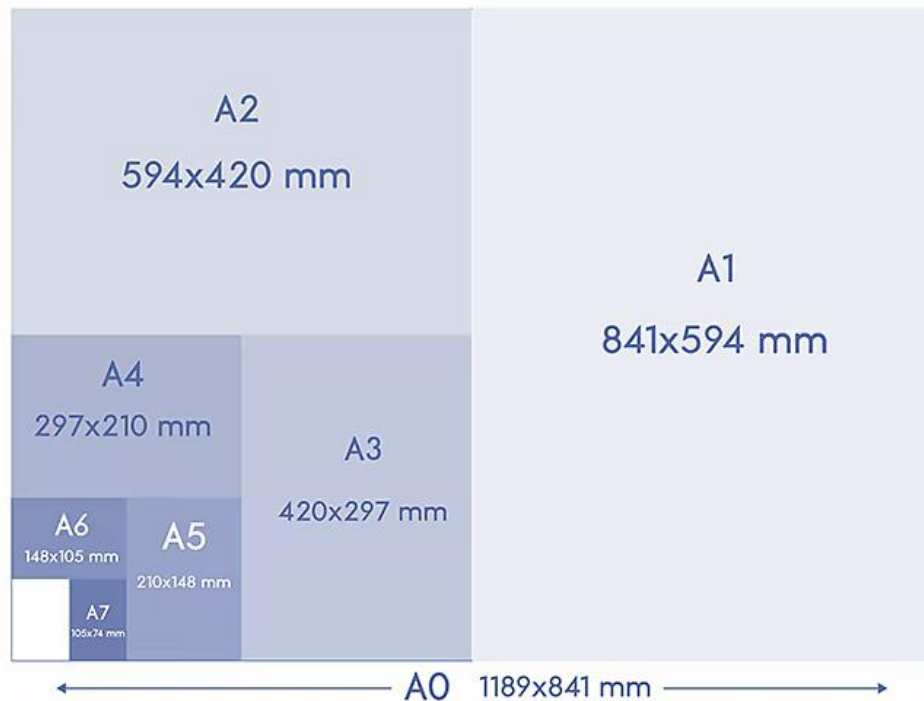
FORMAT AND STYLE OF THESIS WRITING FOR M.S. / Ph.D. DEGREE



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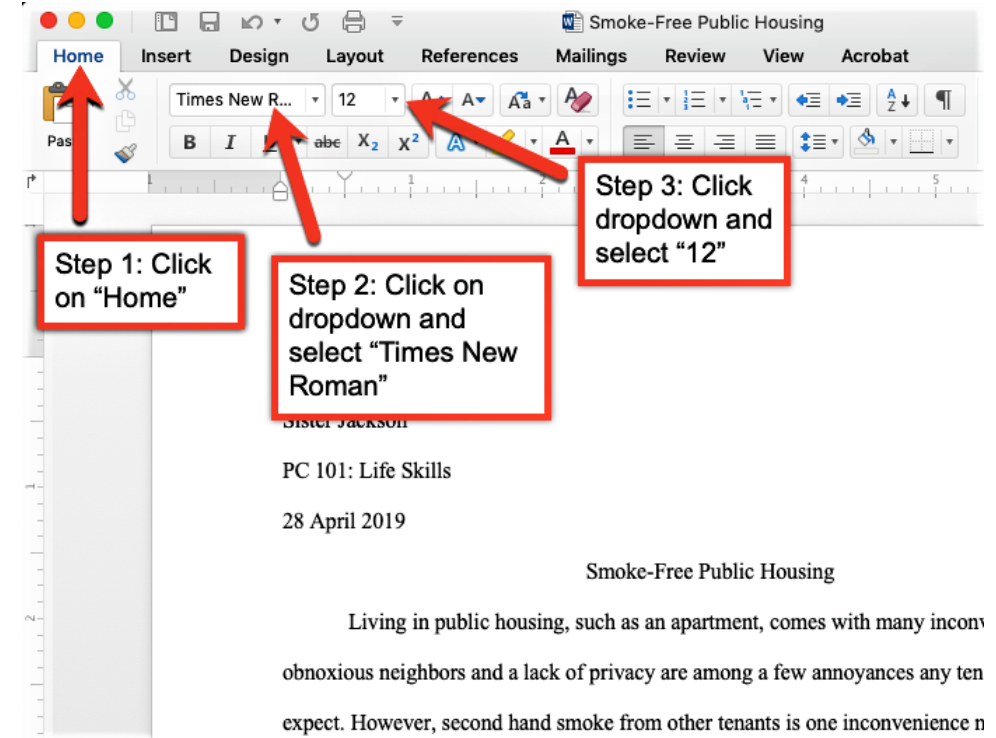
1. Sizes and Thickness of Paper

Thesis is to be printed on A4 size quality offset paper and minimum weight of paper should be 80 gsm.



Typing or Print

- The typeface should be consistent and the copy must be clean for both text and illustration. Dot matrix printers should not be used unless giving near letter quality.
- The general text of the thesis should be spaced at one and a half with single spacing for footnotes or lengthy quotations.
- Triple or larger spacing may be used where necessary to set off headings, subheadings or illustrations.



- The thesis must be in “letter quality” print and laser printing is recommended and standard font type (Times New Roman or Arial font preferable) may be used during typing but it must be consistent throughout.
- The print size should be at least 12 points.

stage) compared to normal irrigation (Randhawa *et al.*, 2014). In another experiment, Hussain *et al.* (2015) showed the reduction of 100-grain weight (8%), yield plant⁻¹ (19%), and yield kg ha⁻¹ (13%) under rainfed condition over control (irrigation at flowering and pod formation stages).

2.6.6 Oxidative stress under drought

According to Gunes *et al.* (2007), drought stress (40% FC) increased H₂O₂ concentration (55-133%) and MDA content (25-68.7%) over control plants (60% FC).

Margins, Layout of Text and Text Writing

- There must be a margin of 4 cm (1.5 inch) to allow for binding on the left hand side of the paper.
- Minimum margins of 2.5 cm (1 inch) are required at the top, bottom and right edge. This also applies to tables, figures and plates.

3.11.3 Plant protection measure

Root rot disease was observed at 10 days old seedling. Autostin® 50 WDG (Carbendazim) @ 1g L⁻¹ was sprayed for two times at 3 days interval.

3.12 General observation of the experimental pots

Observations were made regularly and the plants looked normal green. The maximum flowering stage and pod initiation were not uniform.

3.13 Crop sampling and data collection

There were two sets of experimental pots. One set of pots was used for collecting growth, and yield parameters and another set was used for measuring physiological and biochemical parameters.

3.14 Harvesting and threshing

Crops of each treatment were harvested at different dates depending on their completion of 90% to 95% maturity when the whole plant became yellow and pods became brown to black in color. The seeds were separated from the plants. Dried seeds and stovers of each pot were weighed and collected as yield contributing data.

3.15 Collection of data

Growth, physiological and biochemical parameters were collected 45 DAS and 15 days after application of treatments at a time. The yield parameters were recorded at harvest.

- A sub-heading at the bottom of the page must have **at least two full lines of type below it**. Otherwise, the sub-heading should begin on the next page.
- The last word on any page should not be hyphenated.
- The line should be short off the margin and the whole word should be typed on the following page.

- The text of the thesis should be clear and precise.
- The presentation should be neat and methodical as much as possible avoiding unnecessary details.
- Spelling should be according to either Webster's Dictionary or Oxford Dictionary but not both.
- Standard abbreviations should be used in the text. Please refer Annexure-IV for example.

the plant age and duration of the stress due to the oxidation of pigments, impaired pigment biosynthesis and so on (Anjum *et al.*, 2011; Saraswathi and Paliwal, 2011; Pandey *et al.*, 2012, Alam *et al.*, 2013; Nasrin *et al.*, 2020). In contrast, TU foliar application under different levels of drought stress increased the chl *a*, chl *b* and chl (*a+b*) content in both chickpea varieties compared to drought-stressed plants alone (Table 2). Exogenous application of TU was found to be effective in mitigating the harmful effects of water deficit conditions on photosynthetic capacity of plants by improving net photosynthetic rates and chl content of drought-stressed clusterbean compared to control plants at both vegetative and flowering stages (Burman *et al.*, 2007). It affects both carbohydrates and nitrogen metabolism which consecutively enhances plant performance (Khokhar *et al.*, 2016). TU improves phloem translocation of photosynthates towards active sink in crop plants such as cereals, pulses and oilseeds and enables them to enhance photosynthetic rates (Bhunia *et al.*, 2015; Singh and Singh, 2017; Verma, 2019; Waqas *et al.*, 2019).

4.3 Biochemical parameters

- Citation of reference in the text should be in the author(s) and year system within parentheses without a comma between the name of the authors and the year.
- When two or more references within the same parenthesis, they should be listed in descending order of the year of publication and be separated by a semicolon.
- When more than two authors in the text, only the first author should be named, followed by *et al.* (Example: For single author in beginning: Islam (2006), for two authors in beginning: Islam and Miah (2006), for more than two authors in beginning: Islam *et al.* (2006); For single author in end: (Islam, 2006), for two authors in end: (Islam and Miah, 2006), for more than two authors in end: (Islam *et al.*, 2006).

the plant age and duration of the stress due to the oxidation of pigments, impaired pigment biosynthesis and so on (Anjum *et al.*, 2011; Saraswathi and Paliwal, 2011; Pandey *et al.*, 2012, Alam *et al.*, 2013; Nasrin *et al.*, 2020). In contrast, TU foliar application under different levels of drought stress increased the chl *a*, chl *b* and chl (*a+b*) content in both chickpea varieties compared to drought-stressed plants alone (Table 2). Exogenous application of TU was found to be effective in mitigating the harmful effects of water deficit conditions on photosynthetic capacity of plants by improving net photosynthetic rates and chl content of drought-stressed clusterbean compared to control plants at both vegetative and flowering stages (Burman *et al.*, 2007). It affects both carbohydrates and nitrogen metabolism which consecutively enhances plant performance (Khokhar *et al.*, 2016). TU improves phloem translocation of photosynthates towards active sink in crop plants such as cereals, pulses and oilseeds and enables them to enhance photosynthetic rates (Bhunia *et al.*, 2015; Singh and Singh, 2017; Verma, 2019; Waqas *et al.*, 2019).

4.3 Biochemical parameters

- Headings and sub-headings of the text must be consistent and correspond to the headings given in the Table of Contents.
- Each major chapter should begin on a new page.
- Heading of each chapter should be centered leaving 4 spaces from the top of individual page.

Chapter III

MATERIALS AND METHODS

This chapter describes the time, site, weather condition, planting materials, treatments, experimental design and layout, crop growing methods, fertilizer application, seed sowing technique, different cultural practices, data collection methods and statistical analysis of the experiment.

Page Numbering

- The text is to be numbered at the bottom (center) of the page.
- The number does not appear on the first page of the text although is understood to be a numeral “1”.
- The page number of the text will be started from Introduction and continued up to the Appendix (if any).
- The contents before Introduction are to be numbered in roman numbers.

ROS	Reactive oxygen species
RuBisCo	Ribulose -1, 5- biphosphate caroxylase or oxygenase
RWC	Relative water content
TU	Thiourea
viz.	Namely

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Chapter I

INTRODUCTION

The climate change is increasing to such an extent that it has already exerted a negative impact on the required quantity of water for its inhabitants, though it covers 71% of the earth's surface (Alam *et al.*, 2014a). Climate change increases the risks of rising temperature, which is projected to be higher at 1.5 °C (Hoegh-Guldberg *et al.*, 2018), whereas Assad *et al.* (2019) stated that the average temperature of the world would raise by 1.4 to 5.8 °C until the end of the century. Drought stress increased with the infrequent patterns of precipitation, increased temperature, and uncontrolled use of water by urbanization and industrialization in every country of the world (Johal and Hagroo, 2019).

United Nations (2019) reported that the world population is supposed to reach 8.6, 9.8 and 11.2 billion by 2030, 2050 and 2100, respectively, but agricultural lands will not be able to produce at the same speed. Furthermore, every year, 83 million peoples are added to the world's population (UN, 2019). Already one in nine people around the world suffer from hunger, and the only way to feed them is by doubling food production in a sustainable way (OECD/FAO, 2019). To meet the challenge of growing populace the requirement of food must be increased by 70% by the year 2050 (Hasanuzzaman *et al.*, 2018a). As Bangladesh is an agriculture-based country, it is also battling to adapt to the climate change and to feed the increasing population to achieve food security (Islam *et al.*, 2017).

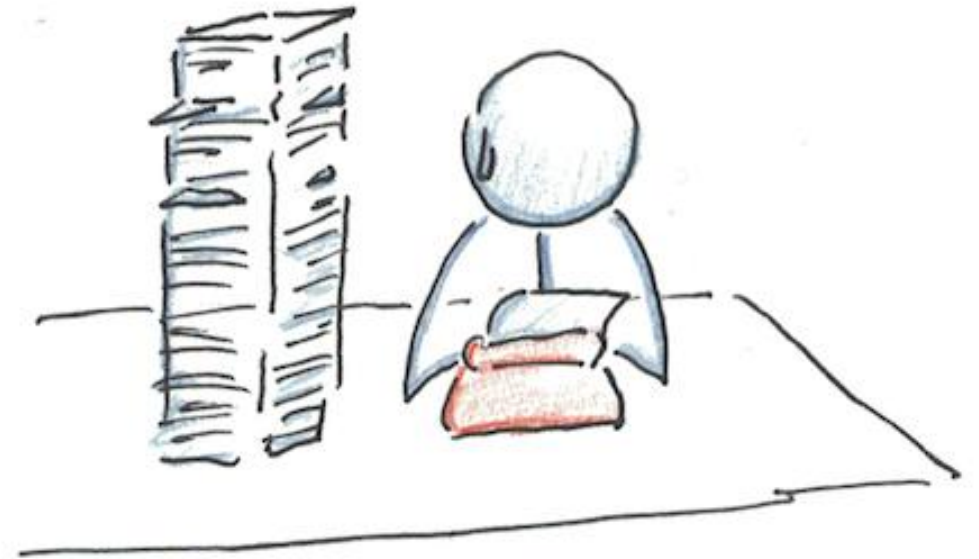
Since the first evolution of a plant, the earth has been experiencing a repeatedly changing climate. Being a sessile organism, having no locomotive structures, they frequently face a number of adverse environmental conditions known as abiotic stress, including drought, salinity, temperature extremes, toxic metals, UV radiation, etc., which has a detrimental effect on plant survival, biomass production and yield of plants (Hasanuzzaman *et al.*, 2012a). Almost 90% of cultivable lands are subjected to both biotic and abiotic stresses, which cause maximum 70% yield losses in major

Line Spacing

- General text should be set to ensure maximum double spacing between lines.
- Single space may be used incase of long tables, long quotations, multilane captions, preliminaries, acknowledgement, abstract, etc.

Tables, Figures and Plates

- The word “Figure” designates all other non-verbal material used in the body of the thesis and in the appendices, such as charts, graphs, maps, drawing, diagrams, etc.
- The word “Table” designates tabulated numerical data used in the body of the thesis and in the appendices.
- The word “Plate” designates photograph used in the body of the thesis.



- Tables, figures, plates and other illustrations must always be cited in the text.
- When making reference to a Table, Figure or Plate in the body of the text, the capitalized full word and number should be used. e.g. Table 26. Figure 1. Plate 20.
- In case of plates, high quality photo paper may be used during printing.
- Any other procedure must be approved by the Post Graduate Dean, in advance of submission.

- Tables, Figures or Plates of one-half pages or less in length may appear on the same page with text, separated from the text above and below by triple spacing.
- If larger than half-page, they must be placed on a separate sheet.
- Two or more small Tables, Figures or Photographs may be placed together on a single page.

- Original photographs or photo-offset must be provided in all required copies of the thesis. They should be properly pasted on paper with permanent non-wrinkle glue.
- Colour or black & white photographs printed on photo-paper or photo-offset paper are preferred rather than being pasted on.
- High quality graphics and photocopies (colour or black and white) are acceptable.
- Use of photo mounting corners, staples or transparent tape is prohibited.
- Do not use Table and Figure or drawing to present the same information.

- The use of folded pages in a thesis is discouraged. Maps, Drawing and Tables, however, may be folded if they can't be presented on regular size pages. Approval for this must be received from the Supervisor.
- Tables, Figures or Plates are inserted as near as possible following the text they illustrate.

- The number of Table and its caption are placed two spaces above the top line of the Table.
- The number of the Figure and Plate are placed two spaces below the bottom edge of the Figure and Plate.
- The placement of Table, Figure and Plate, vertical or horizontal, does not alter the position of the page number.

Tables, Figures and Plates are numbered in separate series. Each Table, Figure, Plate including any in the appendix, has a number in its own series. Each series is numerically numbered consecutively as follows:

Figure 1, Figure 2 etc.

Table 1, Table 2 etc.

Plate 1, Plate 2 etc.

Appendix I. etc.

(Note: Other systems of numbering may be acceptable if used consistently by the consent of Supervisor). If any Table continues to the following or subsequent pages, the top line should be written as Table having cont'd within parenthesis; the caption should not be repeated. e.g.

Table 16 (cont'd).

- Captions are the descriptive titles of Tables, Figures or Plates and should be kept to one line of type, the shorter the better, as these are the same titles, which make up the List of Tables, List of Figures or List of Plates.
- On broad side pages, Table headings are typed above tabular material and Figure legends are typed below the illustration, parallel to the way the copy is read.

- Captions of Tables, Figures or Plates should be self-explanatory and include enough information so that each Table or Figures or Plates is intelligible without reference to the text or other Tables and Figures.
- The title and caption should summarize the information presented in the Table and Figures without repeating the sub-heading.
- Abbreviations are acceptable but nonstandard ones should be explained in footnotes below the Table or the captions.
- Footnotes are designated with superscript lowercase letters.

Order of Items

7.1 Cover and Title pages:

The student should follow the following instruction for cover and title pages:

7.1.1. The title of the thesis should appear in **14-18 point boldface upper case** but scientific name lower case letters in italic form.

7.1.2. The name of the student should be in upper case letters and should be identical to the one in the copyright page. The name used must be the student's legal name as it appears on the University records.

7.1.3. The monogram of the University should be identical of the original monogram. It may be multi colour or black and white.

7.1.4. The Department's name should be written in full e.g. DEPARTMENT OF GENETICS AND PLANT BREEDING.

7.1.5. Type in SHER-E-BANGLA AGRICULTURAL UNIVERSITY, DHAKA-1207 in uppercase letters.

7.1.6. The date of the cover and title pages should indicate the last month of the semester along with year of the degree awarded. Cover and title page should be as per the format of Annexure-I. (N.B: Cover page and title pages will be identical with each other).

THIOUREA-INDUCED DROUGHT STRESS TOLERANCE IN
TWO CHICKPEA VARIETIES

NAZNIN AHMED



DEPARTMENT OF AGRONOMY
SHER-E-BANGLA AGRICULTURAL UNIVERSITY
DHAKA-1207

JUNE, 2020

7.2. Approval page of thesis:

The approval page should be as per the format of Annexure-II.

7.3. Declaration page by the Supervisor:

The declaration given by the Supervisor should be included. The page should be as per the format of Annexure-III

7.4. Dedication (optional):

THIOUREA-INDUCED DROUGHT STRESS TOLERANCE IN
TWO CHICKPEA VARIETIES

BY

NAZNIN AHMED

REGISTRATION NO. 13-05291

*A Thesis Submitted to
The Department of Agronomy, Faculty of Agriculture
Sher-e-Bangla Agricultural University, Dhaka
In partial fulfillment of the requirements
for the degree
of*

MASTERS OF SCIENCE (MS)
IN
AGRONOMY

SEMESTER: JANUARY- JUNE, 2020

APPROVED BY:

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Chairman
Examination Committee



DEPARTMENT OF AGRONOMY

Sher-e-Bangla Agricultural University
Sher-e-Bangla Nagar
Dhaka-1207

CERTIFICATE

This is to certify that the thesis entitled "*THIOUREA-INDUCED DROUGHT STRESS TOLERANCE IN TWO CHICKPEA VARIETIES*" submitted to the Department of Agronomy, Sher-e-Bangla Agricultural University, Dhaka, in partial fulfillment of the requirements for the degree of *MASTER OF SCIENCE (MS) in AGRONOMY*, embodies the result of a piece of bonafide research work carried out by *NAZNIN AHMED*, Registration No. *13-05291* under my supervision and guidance. No part of the thesis has been submitted for any other degree or diploma.

I further certify that any help or source of information, received during the course of this investigation has been duly acknowledged.

Dated:

Place: Dhaka, Bangladesh

Prof. Dr. Mirza Hasanuzzaman

Supervisor

***DEDICATED
TO
MY BELOVED PARENTS***

*My Wife
Zahra and Nancy*

To whom I say “Sorry” prior to saying “Thanks” for being with me.

7.5. List of Abbreviations of Technical Symbols and Terms (optional):

- Page of the list of Abbreviations of Technical Symbols and Terms should be incorporated following the page of list of Tables and figures.
- In this respect the student is advised to consult information source such as Abbreviations published by the American Standards Association and other information sources available in the Central Library.
- These abbreviations are also frequently found listed at the back of standard text on technical writing.

ABBREVIATIONS AND ACCRONYMS

ANOVA	Analysis of variance
AsA	Ascorbic acid (ascorbate)
BARI	Bangladesh Agricultural Research Institute
BBS	Bangladesh Bureau of Statistics
CAT	Catalase
Chl	Chlorophyll
CRD	Completely randomized design
CV	Coefficient of variance
cv.	Cultivar
DAS	Days after sowing
DHA	Dehydroascorbate
<i>et al.</i>	<i>et alibi</i> (and others)
FAO	Food and Agriculture Organization
FC	Field capacity
GSH	Reduced glutathione
GSSG	Glutathione disulfide
i.e.	id est (That is)
LSD	Least significance difference
MDA	Malondialdehyde
Pro	Proline
ROS	Reactive oxygen species
RuBisCo	Ribulose -1, 5- biphosphate carboxylase or oxygenase
RWC	Relative water content
TU	Thiourea
viz.	Namely

7.6. Acknowledgments

- These should be given on a page following the List of Abbreviations of Technical Symbols and Terms.
- The student should acknowledge to their Supervisor, Co-supervisor, member(s) of the advisory committee, Chairman of the department, Post Graduate Dean, Vice Chancellor, Friends, Parents, library and information support service, source of financial support etc.

ACKNOWLEDGEMENTS

All the author's praises and appreciation are for the Almighty Allah for bestowing upon her the wisdom and potential for the successful accomplishment of her research work for the degree of Masters of Science (MS) in Agronomy.

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The Author

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List of contents

- The list of contents is advised for monitoring the serial no. of chapter, chapter name with their starting page no.
- Chapter headline should be in uppercase but subheading should be in lower case.

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List of Tables, Figures and Plates

- A list of Tables, Figures and Plates should appear on separate page with after page numbers of text.
- However, if the lists are very short they may be combined on the page under the title “List of Tables and Figures”.
- It is advised that the serial number be used separately for tables, figures and plates.
- The list of Tables, Figures and Plates uses exactly the same captions that appear in the text.

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Abstract

- The student is required to incorporate an abstract following the declaration page.
- The abstract must be confined in a single page and to be written in single space.
- The abstract contains the gist of the study.
- The major purpose of the abstract is to give information which will enable the reader to decide whether reading the complete work or not.
- The following information is generally included:
 - ✓ A brief statement of the problem
 - ✓ A brief description of the materials and methods
 - ✓ The major findings of the study

THIOUREA-INDUCED DROUGHT STRESS TOLERANCE IN TWO CHICKPEA VARIETIES

ABSTRACT

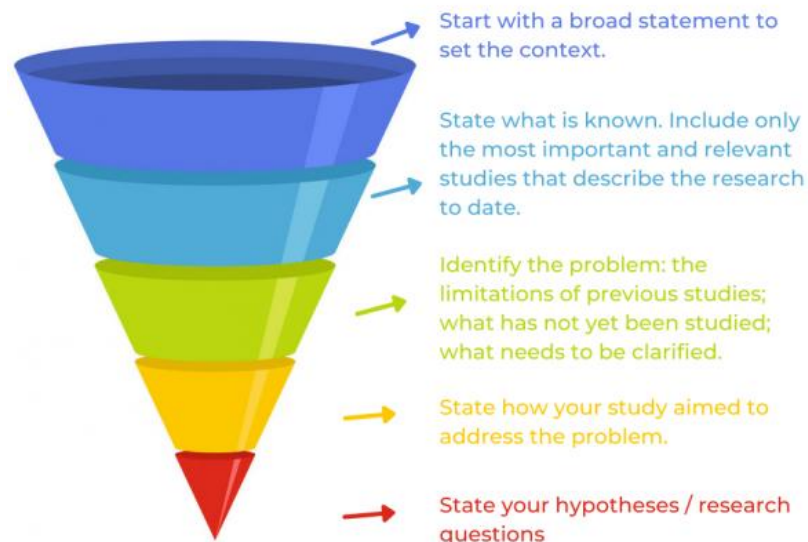
Drought stress is one of the major constraints for crop production around the world; hence, a number of mechanistic approaches are required to mitigate the negative impact of drought stress. Two chickpea varieties BARI Chola-7 and BARI Chola-9 were studied to understand the effect of drought stress and the protective role of thiourea (TU) in improving drought stress tolerance. The experiment was conducted at the Department of Agronomy, Sher-e-Bangla Agricultural University, Dhaka, Bangladesh, from December 2019 to March 2020. The experiment consisted of sixteen treatments with four levels of drought stress: D₀ = no drought stress i.e. soil moisture at 100% field capacity (FC), D₁ = mild drought stress (25% depletion from FC), D₂ = moderate drought stress (50% depletion from FC), D₃ = severe drought stress (75% depletion from FC) with and without 5 mM TU application. This study was carried out in a completely randomized design (CRD) with three replications. All the obtained data were subjected to one-way analysis of variance (ANOVA). In the current study, the highest reduction of plant height, root length, fresh weight and dry weight of shoot and root, number of branches plant⁻¹, RWC and chlorophyll (chl) content was found under severe drought stress in the two chickpea varieties compared to control. A sharp increase of malondialdehyde (MDA), H₂O₂ and proline (Pro) content was observed under mild, moderate and severe drought stress. However, foliar spray of TU mitigated the oxidative damages under drought stress as reflected in improved growth and physiological parameters under mild and moderately stressed plants of both the varieties. Ascorbate (AsA) content was decreased and glutathione (GSH) and glutathione disulfide (GSSG) content were increased under D₁, D₂ and D₃. Between the two varieties, BARI Chola-9 was more tolerant compared to BARI Chola-7. Besides, TU has proved its beneficial effect against drought stress by increasing MDA, H₂O₂ and Pro in mild and moderately stressed plants through modulating non-enzymatic antioxidants. Drought stress lowered the weight of 100-seed, seed yield plant⁻¹, stover yield plant⁻¹ and biological yield plant⁻¹, which were further improved by foliar spray of TU under mild and moderate drought stress of both the chickpea varieties. Noteworthy that BARI Chola-7 could not survive till maturity and plant death in two treatments (V₁D₃TU₀ and V₁D₃TU) occurred finally. Those two treatments were not considered for measuring yield parameters under drought stress. Nonetheless, TU did not show any significant effect in improving stress-inducing damage under severe drought stress. However, the effect of TU was more promising in ameliorating oxidative stress under mild and moderately stressed plants of BARI Chola-9 compared to BARI Chola-7. Thus it was concluded that TU foliar spray improved morphological, physiological, biochemical and yield parameters under mild and moderate drought stress of chickpea.

7.11 Main body of text

- i). Introduction
- ii). Review of Literature
- iii). Materials and Methods
- iv). Results and Discussion
- v). Summary and Conclusion
- vi). References
- vii). Appendices (if any)

7.11.1. Introduction

- The introduction should contain a brief statement of the problem under investigation and brief review of the most pertinent literature.
- It should outline general character, the scope and objectives of the research.



STRUCTURE OF THE THESIS INTRODUCTION	1. Opening statement	<ul style="list-style-type: none">• introducing the research field• stating the research problem• layout of the chapter
	2. Background of the study	<ul style="list-style-type: none">• Secondary research-based facts• Evidence with references• Foundation of the research and its concepts
	3. Research problem	<ul style="list-style-type: none">• Identifies the research gaps• Identifies the missing information• Need for filling the research gaps
	4. Research aim and objectives	<ul style="list-style-type: none">• 1 aim• 3- 6 objectives supporting the aim
	5. Significance of the study	<ul style="list-style-type: none">• Contribution to academia• Contribution to industry• Contribution to government/ economy
	6. Limitations of the study	<ul style="list-style-type: none">• Methodological limitations• Conceptual limitations• Theoretical limitations
	7. Thesis structure	<ul style="list-style-type: none">• Structure of the rest of the thesis• Can be presented in the form of text/ diagram

7.11.2. Review of Literature

- Review of literature should be related to studies.
- It should be written comprehensively in the form of a review article publishable in a standard journal.



7.11.3. Materials and Methods

- It should be described briefly but clearly.
- General techniques and methods are described in this chapter.
- If the methods of other investigation are used without any change, should be cited.

General overview of the subsection
Justify approach / method / technique
Background information

Specific detail about materials & methods
Justify choices
Emphasise care taken during procedure

Analysis and processing

State limitations & solutions

7.11.4. Results and Discussion

Results of the studies are presented in this chapter and the findings are discussed clearly.



Results

- ✓ Include experimental data, but not the interpretation
- ✓ Incorporate statistical analysis where applicable
- ✓ Follow sequential organization when presenting data
- ✓ Include texts, figures, and tables
- ✓ Avoid speculations

Results vs. Discussion



Discussion

- ✓ Explain any surprising, unexpected, or inconclusive result(s)
- ✓ List all the major findings of your study
- ✓ Interpret and explain the findings effectively
- ✓ Mention limitation if any
- ✓ Relate to what others have done

7.11.5. Summary and conclusion

- Brief summary of thesis is presented in this chapter.
- Any conclusion drawn or future suggestions made on the basis of findings of the students are also stated briefly in this chapter and treated as last major of the text.

SUMMARY VERSUS CONCLUSION

The summary is an abridged version of a text that only contains the main points.	The conclusion is the end or finish of a chapter or text.
The main aim of a summary is to sum up the main points.	The purpose of a conclusion is to conclude the text smoothly.
An executive summary is at the beginning of a document.	A conclusion is at the end of a document.
A summary should also have a conclusion.	A conclusion can include the summary of the main points.

7.11.6. References

- References should be typed in **single space**.
- Reference must be complete, clear and exact and must give sufficient information to enable any person reading the thesis to find the reference quickly and easily.
- A reference to an article in a journal must include author's name and year of publication, the title of article, the title of the journal, volume if applicable, issue number if applicable and inclusive pages.
- A reference to a book must include the name of the author with year of publication, title of article in the book, title of the book, volume if applicable, editor if applicable, place of publication if applicable, publishers if applicable, and specific page number.

- The titles of journals should be abbreviated; they must follow a standard form as used in a reputed research journal.
- All references listed in the reference section must be cited in the text and must be listed in the reference section.
- Reference to conference proceedings must include the date and location of conference.
- Only the published reference should be listed in references.
- If work cited is in preparation, submitted but not yet accepted for publication or not readily available in libraries, cite the work parenthetically only in the text, e.g. (Jones, unpublished) or (Jones, personal communication).

- Obtain the written permission from the person(s) cited as the source of the unpublished information.
- References must be consistent in format.
- Alphabetical listing of references by author should be given.
- In case of more than one references of same author, should be cited chronologically (year wise).



Bryan Gaensler ✓
@SciBry



Research is spending 6 hours reading
35 papers, so you can write one
sentence containing 2 references.

2018-04-26, 5:51 PM

Example

Reference from journal:

Chauhan, J.S., Chauhan, V.V., Lodh, S.B. and Dash, A.B. (1992). Environmental influence on genetic parameters of quality components in rain fed upland rice (*Oryza sativa* L.). *Indian J. Agric. Sci.* 62(2): 773-775.

Reference from book:

Kumar, I., Maruyama, K. and Moon, H.P. (1994). Grain quality consideration in hybrid rice. **In:** Hybrid Rice Technology: new development and future prospects. S.S. Virmani,(ed.). IRRI, Manila, Philippines. pp. 123-130 / p.123.

Reference from thesis:

Hossain, M.S. (2004). Development and evaluation of three-line rice hybrids using inter sub-specific (*indica/japonica*) derivatives. Ph.D. thesis, IARI, New Delhi, India.

Reference from conference proceedings:

Pradhan, S.B. and Ratho, S.N. (1990). Breeding for cytoplasmic genetic male sterile lines in rice. Extended summary, Proc. Int. symp. on rice research: New frontier, Nov. 15-18, DRR, Hyderabad, India, pp.54-56.

Web reference: e.g. <http://www.sau.edu.bd>

7.11.7. Appendices

- Appendices are included to provide detailed information that would otherwise detract the readability of the main body of the text.
- Computer programmes, lengthy tables and detailed laboratory procedures etc. are a few examples of material to include in the Appendix.
- Appendices must be paginated in accordance with the text.
- All tables and figures in the Appendices must be appropriately labeled and listed in the lists of Appendices.

APPENDICES

Appendix I. Phenotypic differences in BARI Chola-7 under different treatment combination



Here, V₁= BARI Chola-7, D₀= no drought stress, D₁= mild, D₂= moderate, and D₃= severe drought stress. TU₀= No thiourea (TU) and TU₅= 5 mM TU foliar spray

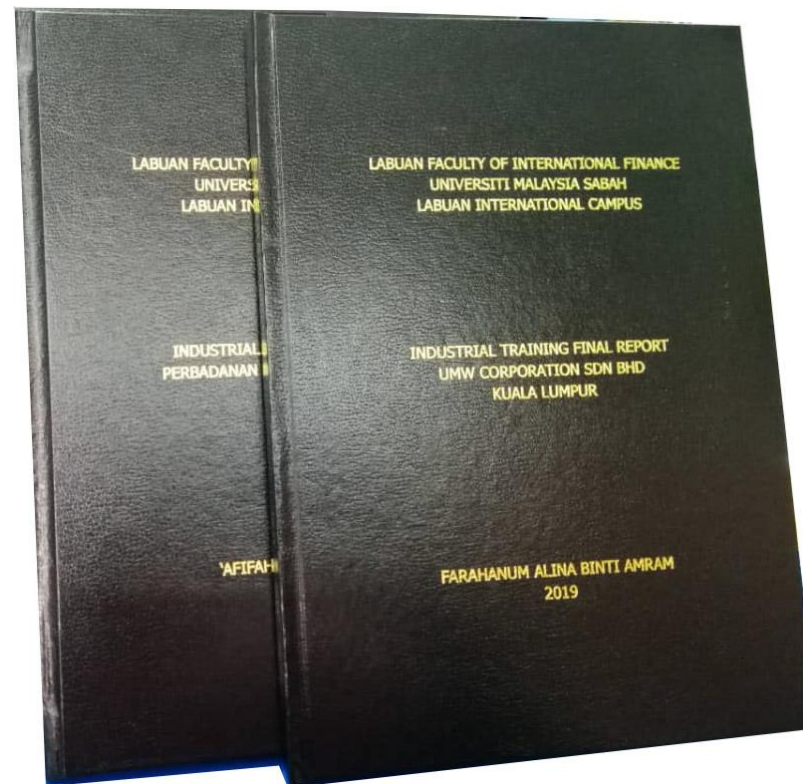
9. Final binding and Colour

- The thesis should be sewed and bound in strong waterproof cloth or leather and the colour of the binding page should be **Deep blue** for M.S. and **Maroon** for Ph.D. thesis.



10. Lettering on cover page

- The Lettering on cover page should be in **golden** ink.



11. Lateral side:

- Left corner : M.S. THESIS or Ph. D. THESIS (Upper case)
- Middle : Name of student (Upper case)
- Right corner: Month and Year of degree awarded

11. Number of copy to be submitted:

- **Three copies** rough binding of thesis should be submitted for evaluation.
- **At least five copies** binding thesis (**hard copy**) should be submitted before degree awarding among which, one copy for supervisor, one for Co-supervisor, one for Departmental library, one for central library and one for student.

Annexure-I (Cover page and Title page)

TITLE

STUDENT'S NAME



**NAME OF THE DEPARTMENT
SHER-E-BANGLA AGRICULTURAL UNIVERSITY
DHAKA-1207**

MONTH, YEAR

Annexure-II (Approval page)

TITLE

**BY
NAME OF THE STUDENT**

REGISTRATION NO.

A Thesis
Submitted to the Faculty of,
Sher-e-Bangla Agricultural University, Dhaka,
in partial fulfillment of the requirements
for the degree of

MASTER OF SCIENCE / DOCTOR OF PHILOSOPHY

IN

NAME OF THE DEPARTMENT

SEMESTER:, Year

Approved by:

**(Name)
Designation
Supervisor**

**(Name)
Designation
Co-supervisor**

**(Name)
Chairman
Examination Committee**

Annexure-III (Declaration page by the supervisor)
(Official pad of Supervisor is preferable)

CERTIFICATE

This is to certify that thesis entitled, "-----

-----"

*submitted to the Faculty of -----, Sher-e-Bangla
Agricultural University, Dhaka, in partial fulfillment of the
requirements for the degree of MASTER OF
SCIENCE/DOCTOR OF PHILOSOPHY in NAME OF THE
DEPARTMENT, embodies the result of a piece of bona fide
research work carried out by -----
Registration No.----- under my supervision and
guidance. No part of the thesis has been submitted for any
other degree or diploma.*

*I further certify that such help or source of
information, as has been availed of during the course of this
investigation has duly been acknowledged.*

Dated:

Place: Dhaka, Bangladesh

(Name of Supervisor)

**Designation
Supervisor**

Annexure IV. Some commonly used abbreviations

Full Word	Abbreviation	Full word	Abbreviation
Acre	A	Median Lethal Dose	LD
Active ingredient	ai	Meter	m
and others (at eli)	<i>et al.</i>	Microgram	ug/ μ g
Centimeter	cm	Micron	um/ μ
Cubic Centimeter (Solid materials)	cm ³	milliequivalent	meq
Cubic centimeter (liquid materials)	cc	Milligram	mg
Foot, feet	ft	Milliliter	ml
Cubic Foot	ft ³	Millimicron	mu/ μ m
Degree Celsius (Centigrade)	⁰ C	Minimum lethal dose	MLD
Degree Fahrenheit	⁰ F	Minute	min
Degree of freedom	df	Molar	M
Diameter	diam	Month	mo
Emulsifiable Concentrate	EC	Normal	N
Gallon	gal	Ounce	oz
Fluid ounce	oz	Pint	pt
Gallon Imperial	Imp gal	Pound	lb
Gram	g	Relative humidity	RH
Hectare	ha	Square centimeter	cm ²
Hour	hr	Square meter	m ²
Hydrogen ion conc.	pH	Squire inch	inch ²
Inch	inch	Standard deviation	SD
Kilogram	kg	Standard error	SE
Kilometer	km	Ton (English, 2,000 lb)	T
Least significant difference	LSD	Ton (Metric 1,000 kg)	MT
Liter	l	Week	wk
Median Effective Dose	ED	Yard	Yd
Median Lethal Conc.	LC	Year	yr