

**REGULATIONS CONCERNING THE CONFERRAL OF A
DOCTORATE**

Wageningen University

Table of contents

General provisions	3
Article 1 Definitions and general provisions	3
Article 2 Introductory provisions	3
The doctoral student (candidate)	4
Article 3 Qualifications for the doctorate	4
The doctoral thesis supervisor (promoter) and co-supervisor (co-promotor)	5
Article 4 Qualifications and tasks of the doctoral thesis supervisor	5
Article 5 Qualifications and tasks of the doctoral thesis co-supervisor	5
The thesis committee	7
Article 6 Composition and operation of the thesis committee	7
Application for the doctoral defence ceremony and appointment of the doctoral thesis supervisor/co-supervisor	8
Article 7 Application for the doctoral defence	8
Article 8 Appointment of doctoral thesis supervisor or co-supervisor	8
Evaluation of the doctoral thesis	9
Article 9 Evaluation by the doctoral thesis supervisor	9
Article 10 Evaluation by the thesis committee	9
The thesis	11
Article 11 Contents of the thesis and the propositions	11
Article 12 Structure and design of the thesis	11
Article 13 Language of the thesis and the propositions	12
Article 14 Printing/reproduction and distribution of the thesis	12
The public defence of the thesis	13
Article 15 The thesis defence ceremony	13
Article 16 Conferring the doctorate and the degree certificate	13
The designation <i>cum laude</i>	14
Article 17	14
Settling disputes	15
Article 18	15
Article 19 Complaint handling procedure	15
Article 20 Objection procedure	15
Honorary doctorate	17
Article 21	17
Final provisions	18
Article 22	18
Appendices	19

General provisions

Article 1 Definitions and general provisions

1.1 Definitions

As used in these regulations, the following terms are defined below:

Act: the Higher Education and Research Act.

Regulations: the regulations concerning the conferral of a doctorate, including the corresponding appendices;

The other terms appearing in these regulations have the same meaning as those same terms from the Act.

1.2

When these regulations refer to a doctoral thesis supervisor or doctoral thesis co-supervisor, if reference is made to more than one doctoral thesis supervisor or co-supervisor, this should be read as: doctoral thesis supervisors or co-supervisors.

1.3

For purposes of clarity and simplicity, the masculine form (him, his, he) is used in these regulations. Of course, these regulations apply equally to both men and women.

Article 2 Introductory provisions

2.1

At Wageningen University, the doctorate can be conferred based on the doctoral thesis.

2.2

The Academic Board confers the doctorate subject to the provisions in the Act and in these regulations.

2.3

The Academic Board enacts the regulations concerning the conferral of a doctorate after acquiring approval from the Executive Board.

The doctoral student (candidate)

Article 3 Qualifications for the doctorate

3.1

To qualify for the doctorate:

- a. based on the provisions in Article 7.10a, first, second or third clause of the Act, the candidate must have earned the degree of Master at an institute of international education which is recognised by the Academic Board;
- b. as proof of his ability to perform as an independent practitioner of science, the candidate must have written a doctoral thesis or created a technological design; and
- c. must have written at least six and no more than eight propositions; and
- d. must have satisfied the other requirements in these regulations.

3.2

In exceptional cases, the Academic Board can grant a doctorate to individuals who have satisfied the provisions in the first clause under b, c and d, but have not satisfied the provision in that clause under a.

3.3

The doctoral student must have demonstrable proficiency in Dutch or English at the level established by the Academic Board as described in *Appendix 1*.

The doctoral thesis supervisor (promotor) and co-supervisor (co-promotor)

Article 4 Qualifications and tasks of the doctoral thesis supervisor

4.1

A doctoral thesis supervisor must be a professor, a professor holding an endowed chair or a professor by special appointment at Wageningen University or another accredited university.

4.2

An honourably discharged professor retains his right to act as a doctoral thesis supervisor for candidates for whom he was already appointed as supervisor for five years after his discharge.

4.3

If the doctoral thesis supervisor to be appointed is not a professor at Wageningen University, the Academic Board also appoints a professor from Wageningen University as thesis supervisor.

4.4

No more than two doctoral thesis supervisors will be appointed. The Academic Board can appoint more than two doctoral thesis supervisors only in exceptional cases. If multiple doctoral thesis supervisors are appointed, then they will determine amongst each other their individual tasks after consulting the doctoral student. The decision-making between the doctoral thesis supervisors will take place in principle based on unanimity, unless the Academic Board has decided otherwise upon their appointment.

4.5

Individuals who have a family relationship with the doctoral student, or have a relationship with the doctoral student that impairs their objectivity, do not qualify for the position of doctoral thesis supervisor.

4.6

The doctoral thesis supervisor has the task of supervising the doctoral student and is responsible for the supervision. He ensures that the thesis satisfies the requirements pursuant to these regulations.

Article 5 Qualifications and tasks of the doctoral thesis co-supervisor

5.1

The doctoral thesis supervisor can request the Academic Board to appoint one or two doctoral thesis supervisors. If a single doctoral thesis supervisor is appointed, the Academic Board can appoint one or two doctoral thesis co-supervisors. If multiple doctoral thesis supervisors have been appointed, the Academic Board will appoint only a single doctoral thesis co-supervisor, if requested to do so. In such cases, the Academic Board can appoint multiple doctoral thesis co-supervisors only in exceptional cases.

5.2

The doctoral thesis co-supervisor is employed as a member of scientific staff, not necessarily at Wageningen University, and has earned a doctorate at an accredited University.

5.3

Individuals who have a family relationship with the doctoral student or a relationship that impairs their objective judgement with respect to the student do not qualify for the position of doctoral thesis co-supervisor.

5.4

The doctoral thesis co-supervisor aids the doctoral thesis supervisor with the supervision of the doctoral student. He determines whether the doctoral thesis satisfies the requirements pursuant to these regulations and advises the doctoral thesis supervisor in this matter.

The thesis committee

Article 6 Composition and operation of the thesis committee

6.1

The Academic Board appoints a thesis committee for every doctoral student.

6.2

The composition of the thesis committee is as follows:

- a. as chairperson, the rector magnificus in his capacity as chairman of the Academic Board, or his replacement;
- b. a maximum of three of the appointed doctoral thesis supervisors and/or doctoral thesis co-supervisors, including in any case one doctoral thesis supervisor who is a professor at Wageningen University;
- c. four opponents, as further described in Article 6.3, of whom at least one must be a professor at Wageningen University.

6.3

Professors or individuals who have earned doctorates can be appointed as opponents after the Academic Board has evaluated these individuals and determined that they are sufficiently qualified to be a member of the thesis committee.

Opponents/other members of the thesis committee must not be affiliated with or employed by the chair group of the doctoral student or that of one of the thesis supervisors or co-supervisors. They must not have a family relationship with the doctoral student or a relationship with him that could impair their independent judgement.

6.4

The chairperson appoints the primary doctoral thesis supervisor as secretary.

The chairperson cannot vote. The members referred to under clause 2 sub b jointly have a single vote, the other members as referred to in clause 2 sub c have one vote per person. The thesis committee makes decisions based on a simple majority of votes, unless stated otherwise in these regulations. The members can also submit their evaluation and their vote in writing to the chairperson. In any case, the chairperson calls a meeting if the required majority is not achieved by written ballot.

Application for the doctoral defence ceremony and appointment of the doctoral thesis supervisor/co-supervisor

Article 7 Application for the doctoral defence

7.1

At least six months in advance of the desired date of doctoral defence, the doctoral student applies to the Academic Board by submitting the corresponding application form (*Appendix 2*) to the Secretariat; the application must include the documents and information referred to on the application form.

7.2

The doctoral student ensures that at the time of application he satisfies the education requirements referred to in Article 3 of these regulations.

7.3

On the application form, the doctoral student lists the name(s) of the proposed doctoral thesis supervisor(s), their teaching and research remit, university affiliation and work address, along with the same information for the proposed doctoral thesis co-supervisor(s). The application form is signed by the proposed doctoral thesis supervisor(s) and doctoral thesis co-supervisor(s).

Article 8 Appointment of doctoral thesis supervisor or co-supervisor

8.1

Immediately after a doctoral study begins, the Academic Board appoints a doctoral thesis supervisor and possibly (at the request of the supervisor(s)) a doctoral thesis co-supervisor. If required, upon application for the doctoral defence as referred to in Article 7, either the doctoral thesis supervisor or co-supervisor can request the appointment of another thesis supervisor.

8.2

As a result of the request of the doctoral student on the application form referred to in Article 7.1, the Academic Board appoints one or more doctoral thesis supervisors and possibly a co-supervisor, if this has not yet occurred as referred to in Article 8.1.

8.3

Preceding the appointment, the Academic Board can provide a hearing to the doctoral student, the proposed doctoral thesis supervisor(s) and doctoral thesis co-supervisor(s).

8.4

Both the doctoral student and the appointed doctoral thesis (co-)supervisor must accept the appointment. By accepting his appointment, the doctoral thesis (co-)supervisor accepts the applicability of these regulations.

Evaluation of the doctoral thesis

Article 9 Evaluation by the doctoral thesis supervisor

9.1

The doctoral student submits the doctoral thesis and the propositions to the doctoral thesis supervisor for his evaluation.

9.2

In his evaluation of the doctoral thesis and the propositions, the doctoral thesis supervisor takes the recommendation of the co-supervisor into account.

9.3

The evaluation of the doctoral thesis takes place by reviewing it in accordance with the requirements in these regulations, especially regarding the requirements in Articles 11 through 13 and 17, as well as the attainment targets established by the Academic Board as set down in *Appendix 3*.

9.4

The evaluation of the propositions takes place by reviewing them according to the requirements in Articles 11.3, 13.1 and 13.3, and according to general principles of morality and decency.

9.5

If the doctoral thesis supervisor determines that the doctoral thesis and the propositions have satisfied the requirements, he approves the thesis and the propositions.

9.6

The doctoral thesis supervisor (or primary supervisor if there is more than one) informs the Academic Board and the doctoral student about this approval. This approval is not a final decision, but a recommendation to the Academic Board.

9.7

The Academic Board, taking account of the approval of the thesis and the propositions by the doctoral thesis supervisor, decides to appoint the thesis committee.

Article 10 Evaluation by the thesis committee

10.1

After being approved by the doctoral thesis supervisor, the thesis and propositions are submitted by the Academic Board for evaluation to the members of the thesis committee, which has been appointed for this purpose.

10.2

Within six weeks after receiving the thesis and propositions which were approved by the doctoral thesis supervisor, the thesis committee decides on behalf of the Academic Board whether or not the thesis and propositions have provided sufficient proof of competency in the independent practice of science that the doctoral candidate can publicly defend his thesis. A positive decision requires a positive evaluation of all opponents.

10.3

The decision referred to in Article 10.2 is based on a review of the thesis with respect to the attainment targets formulated by the Academic Board, which have been listed in *Appendix 3* and in Articles 11.1, 11.2 and 17 (cum laude), and a review of the propositions with respect to the requirements in Article 11.3.

10.4

As secretary of the thesis committee, the doctoral thesis supervisor reports the decision of the thesis committee in writing to the doctoral student. If the thesis committee has decided that the doctoral student cannot defend his thesis, this decision is explained.

The thesis

Article 11 Contents of the thesis and the propositions

11.1

The thesis can be:

- a. a scientific treatment concerning a specific topic; or
- b. a number of distinct scientific treatments which have already been published (partially or entirely), if they display sufficient coherence with respect to a specific topic; this coherence is to be demonstrated partly by the inclusion of a general introduction and a general discussion which has not been published previously; or
- c. a technological design, comprised of a drawing created with the help of appropriate theoretical knowledge and methodologies from the relevant field, accompanied by a scientific explanation and documentation.

11.2

The thesis is intended as proof of the competency of the doctoral student to conduct independent scientific research.

11.3

At least six and no more than eight propositions are added to the thesis. Two of the propositions concern the topic of the thesis or the technological design, two to four propositions concern a different scientific field and two propositions concern a socially relevant topic. Propositions are concisely worded positions taken by the doctoral student that are formulated in such a way that they can be debated at a scientific level.

11.4

A distinct scientific treatment, as referred to in Article 11.1 under b, which has been written by the doctoral student in cooperation with others, can be part of the thesis only if he has provided a significant contribution and if the portion for which he is primarily responsible is clearly indicated in the thesis.

11.5

The thesis can be written by one individual, or by two or three individuals together. The individuals who have written a thesis together must satisfy the following conditions:

- a. all authors are doctoral students, each of whom satisfies the provisions and procedures in these regulations;
- b. the doctoral students have at least one doctoral thesis supervisor in common;
- c. in the thesis, the portions for which each doctoral student is primarily responsible are clearly indicated;
- d. each doctoral student adds the prescribed number of his own propositions to the thesis;
- e. all doctoral students must defend their thesis on the same day at Wageningen University.

Article 12 Structure and design of the thesis

12.1

The structure and design of the thesis must satisfy the corresponding guidelines established by the Academic Board, which are included in these regulations as *Appendix 4*.

12.2

It is forbidden to include advertising in the thesis or on the cover.

12.3

If the doctoral research has been made possible in part by support, financial or otherwise, from outside the university, this must be reported in the thesis according to the guidelines referred to in article 12.1.

Article 13 Language of the thesis and the propositions

13.1

The thesis is written in either Dutch or English.

13.2

If the thesis is written in Dutch, a translation of the title and a summary of the contents will be added in English. If the thesis is written in English, in any case a translation of the title and a summary of the contents will be added in Dutch.

13.3

The propositions are formulated in the same language as that in which the thesis is written.

Article 14 Printing/reproduction and distribution of the thesis

14.1

Before the thesis is printed or reproduced in any other fashion:

- a. the thesis committee must have decided that the doctoral student can be allowed to defend his thesis;
- b. the cover, the title page, the page opposite the end leaf and page 4 with the ISBN number must be approved by the Academic Board. To this end, the doctoral student must submit copies of these pages for approval to the secretariat of the Academic Board;
- c. the printer's proof of the thesis and the propositions must be approved in writing by the doctoral thesis supervisor, where the doctoral thesis supervisor takes the standards in or pursuant to these regulations into account.

14.2

In the guidelines that are included in these regulations as *Appendix 4*, the Academic Board determines the following:

- a. the number of copies of the thesis that, preceding the public defence, must be provided to the Academic Board.
- b. the number of copies of the thesis that the doctoral student must supply at cost to the Wageningen University library, in consultation with the Executive Board.
- c. the way in which an electronic version of the thesis must be provided.

The public defence of the thesis

Article 15 The thesis defence ceremony

15.1

The defence of the thesis takes place in public in the presence of the thesis committee.

15.2

The public defence is chaired by the rector magnificus as chairperson of the Academic Board, or his replacement.

15.3

The time and place of the public defence are determined by the Academic Board following consultation with the doctoral student and doctoral thesis supervisor. The doctoral student must submit a request for a time and place well in advance.

15.4

The Academic Board establishes the protocol of the public defence. The standard protocol is included in these regulations as *Appendix 5*.

15.5

The doctoral student defends the thesis and the propositions for a period of 45 minutes; during this defence, he is opposed by the thesis committee and all other individuals who have been granted permission by the Academic Board. A request for permission to oppose the doctoral student during the defence must be submitted to the Academic Board at least one week before the date of the public defence.

15.6

The public defence is conducted in English unless the doctoral student has submitted a written request to conduct the defence in Dutch.

Article 16 Conferring the doctorate and the degree certificate

16.1

During a private meeting that takes place immediately following the thesis defence, the thesis committee, on behalf of the Academic Board, decides whether or not to confer the doctorate.

16.2

Following the private meeting of the thesis committee, the chairperson reopens the public meeting and announces the decision of the thesis committee.

16.3

As proof of conferral of the doctorate, the doctoral student receives a degree certificate. The degree certificate is signed on behalf of the Academic Board by the rector magnificus or his replacement, the doctoral thesis supervisor(s) and if relevant, the doctoral thesis co-supervisor(s).

16.4

If a decision has been made to confer the doctorate *cum laude*, then this is listed on the degree certificate.

The designation *cum laude*

Article 17

17.1

If the doctoral student has shown exceptional competency in the independent practice of science, the Academic Board can confer the doctorate *cum laude* (with distinction).

17.2

Up to six weeks before the day of public defence, the doctoral thesis supervisor and any other members of the thesis committee can submit a written proposal to the Academic Board to confer the designation of *cum laude*; this document must explain the reasons for the proposed designation.

17.3

If the evaluation by the thesis committee gives reason to do so, then the Academic Board immediately submits the thesis and the proposal to two experts and requests them to make a recommendation about the proposal in an explanatory letter. The experts must be professors, but not at Wageningen University. One of the experts must be affiliated with a university outside the Netherlands.

17.4

The Academic Board informs the thesis committee about the submitted proposal and calls a closed meeting of the thesis committee immediately preceding the defence ceremony. During this meeting, the thesis committee makes a tentative decision about granting the designation *cum laude*. The experts who have made the corresponding recommendation can attend this meeting to explain their findings and their recommendation.

17.5

The thesis committee makes a decision about the proposal to confer the designation *cum laude* on behalf of the Academic Board during the closed meeting referred to in Article 16.1. The proposal will be approved if no member of the committee votes against it or if no more than one member of the committee abstains from voting. If one or both of the consulted experts has made a negative recommendation, the proposal can be accepted only if there is a unanimous decision of the committee.

Settling disputes

Article 18

18.1

The provisions of the General Administrative Law Act (Awb) apply.

18.2

The regulations concerning the conferral of a doctorate do not apply to legal disputes.

Article 19 Complaint handling procedure

19.1

An interested party can submit a request for mediation or complaint handling to the Academic Board in case of a dispute that concerns the behaviours or decisions of doctoral thesis supervisors, doctoral thesis co-supervisors, the Academic Board itself, or individuals who are acting on behalf of the Academic Board. Mediation does not suspend the term referred to in Article 20.1. In consultation with the party submitting the request, the chairperson of the Academic Board provides mediation or complaint handling in accordance with Chapter 9 of the General Administrative Law Act.

Article 20 Objection procedure

20.1

An interested party can object to decisions made by or on behalf of the Academic Board within six weeks after he is informed of the decision; he does this by submitting a notice of objection in an explanatory letter to the Academic Board.

20.2

Within four weeks after receiving a notice of objection, the Academic Board appoints an advisory committee.

20.3

The advisory committee comprises two members from the Academic Board and a chairperson who is not a member of and is not responsible to the Academic Board. The members of the advisory committee have not been involved in the doctoral procedure that is the subject of the decision.

20.4

The advisory committee acts in accordance with the provisions in Article 7.13 of the General Administrative Law Act. The advisory committee can provide a hearing to the parties involved and is authorised to obtain all information that is necessary for the adequate performance of its task.

20.5

Within four weeks after being appointed, the advisory committee makes a written recommendation to the Academic Board. The recommendation includes a report of the hearing.

20.6

Within four weeks after receiving the recommendation, and in any case within 10 weeks after receiving the notice of objection, the Academic Board makes its decision about the objection, which it reports in an explanatory letter sent to the party who submitted the notice of objection and the other parties involved in the objection procedure.

20.7

If the decision on the objection deviates from the recommendation made by the advisory committee, the letter about the decision explains the reasons for this deviation, and the advisory committee recommendation is included.

20.8

Within six weeks after receiving the decision referred to in Article 19.7, an interested party can appeal to the competent Dutch court against this decision.

Honorary doctorate

Article 21

21.1

Upon nomination by the Executive Board, the Academic Board is authorised to award the degree *Doctor honoris causa* (honorary doctorate) to an individual in recognition of his outstanding accomplishments. This doctorate is conferred by and in the presence of the Academic Board in a manner which is determined by this Board.

21.2

The other provisions in these regulations do not apply to the conferral of an honorary doctorate.

Final provisions

Article 22

In all cases not covered by these regulations, the Academic Board will make a decision on the matter.

These regulations were determined by decision of the Academic Board of Wageningen University on 8 December 2008.

Appendices:

1. Language requirements
2. Application form for doctoral thesis defence
3. Attainment targets
4. Guidelines for structure, design and distribution of the thesis (current Articles 3.10-3.11-3.12-7.1-7.2. including the explanation)
5. Protocol for the thesis defence ceremony

Appendix 1

Language requirements

The doctoral student must have demonstrable proficiency in Dutch or English at the level established by the Academic Board. With respect to proficiency in English, this level is defined as the minimum passing score of 580 on the certified TOEFL PbT language test (or a comparable score of 237 on TOEFL Cb, a score of 92-93 on TOEFL Ibt, or a score of 6.5 on IELTS).

Proficiency in Dutch is defined as having passed the final exam in Dutch for pre-university education in the Netherlands, as shown by possession of a VWO diploma or comparable certificate.

Appendix 2

Application form regarding public defence

* your formal request to defend your thesis (application letter)

In accordance with the regulation for obtaining a PhD degree, I herewith apply for admission to the defence of a PhD Thesis at the Wageningen University

* Your Personal data

WUR-account:

First Name(s):

Family Name:

Home address:

Phone mobile:

Phone:

E-mail:

Date of birth:

Place of birth:

Field of study:

Title of PhD thesis:

Short summary of your thesis (2 sentences is enough)

promoter

co-promotor

I declare that this work is original and has not been used to confer a doctorate elsewhere.

Please add:

A copy of the decision regarding admittance to the PhD programme of Wageningen University or a copy of your MSc diploma from a Dutch University.

Signature candidate:

Signature promoter:

You can send this material to:

Doctorate's secretariat

Att. of ms. D. Alkema / ms. J. Sloot

Costerweg 50

6701 BH Wageningen

(Bode 75)

or by email: promovendi@wur.nl

Appendix 3

Attainment targets for the PhD degree [doctorate]

The recipient of the doctorate is capable of:

1. functioning as an independent practitioner of science, as shown by:
 - a. formulating scientific questions, whether based on social issues or scientific progress;
 - b. conducting original scientific research;
 - c. publishing articles in leading journals, publishing books with leading publishers or making a technical design;
2. integrating his or her own research in, or placing it within the framework of, the corresponding scientific discipline and against the background of a broader scientific area;
3. placing the research aims and research results in a societal context;
4. postulating concisely worded propositions in scientific and societal areas, formulated in such a way that they are subject to opposition and defence.

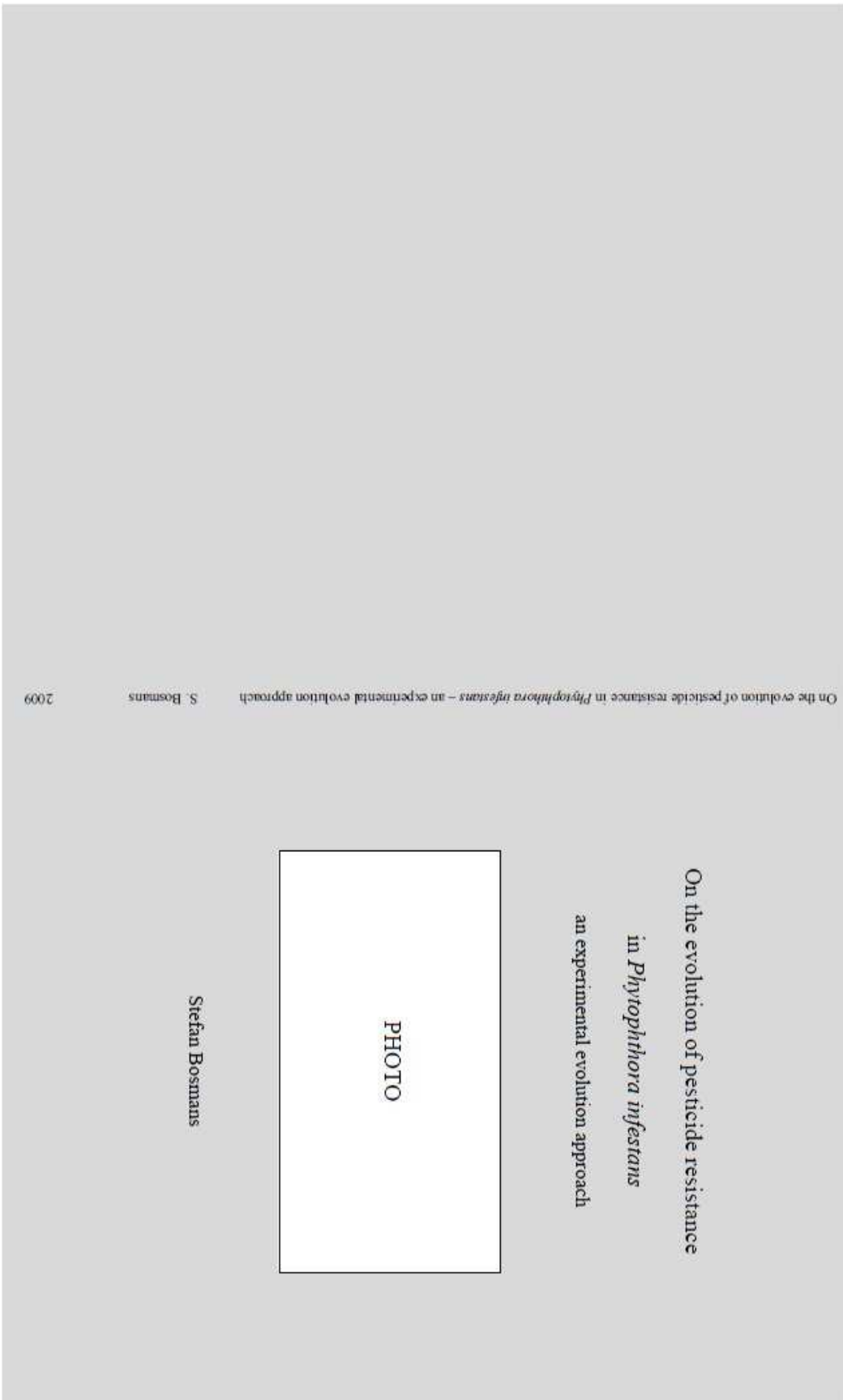
Appendix 4

Design, format, reproduction and distribution of the thesis

Appendixes 4a through 4d describe how the thesis should appear regarding its cover (4a), required title pages (4b), citation of sponsors, if any (4c) and the propositions (4d). Every deviation from these examples requires prior permission from the Academic Board.

Two weeks before the public defence, the doctoral candidate submits 15 copies of the thesis to the secretariat for doctoral conferrals and 15 copies, including a PDF file and an abstract in Word format, to the Library.

Appendix 4a Cover



**The *Phytophthora infestans* avirulence gene *X5yz*
and its potato counterpart *A6***

Piet A. Ardappel

(imaginary example)

Thesis committee

Thesis supervisors

Prof. dr. F. Pietersen
Personal chair at the Laboratory of Phytopathology
Wageningen University

Prof. dr. F. Swartjes
Professor of Phytopathology
Wageningen University

Thesis co-supervisor

Dr.ir. P.A. Willis
Associate professor, Animal Nutrition group

Other members

Prof. dr. W.J. Stekels, Wageningen University
Dr. P. de Groot, University of Amsterdam
Dr. A. De Bruin, Keygene N.V., Wageningen
Dr. P. van Oost, University of Aberdeen, Scotland

This research was conducted under the auspices of the Graduate School of Experimental Plant Sciences

(imaginary example)

**The *Phytophthora infestans* avirulence gene X5yz
and its potato counterpart A6**

Piet A. Ardappel

Thesis

submitted in fulfilment of the requirements for the degree of doctor
at Wageningen University
by the authority of the Rector Magnificus
Prof. dr. M.J. Kropff,
in the presence of the
Thesis Committee appointed by the Academic Board
to be defended in public
on Wednesday 4 February 2009
at 4 p.m. in the Aula.

(imaginary example)

Piet A. Ardappel

The Phytophthora infestans avirulence gene X5yz and its potato counterpart A6,
83 pages.

Thesis, Wageningen University, Wageningen, NL (2009)
With references, with summaries in Dutch and English

ISBN 123-45-67890-123-4

(imaginary example)

Appendix 4c - citation of sponsors

The research described in this thesis was financially supported by The Duth Financers

Financial support from Wageningen University, the G.Schieter Foundation and Biomoney for printing this thesis is gratefully acknowledged.

(imaginary example)
(last inside page of thesis)

Appendix 4d - propositions

Propositions

1. The general assumption that the mesophyll conductance to carbon dioxide in leaves of green plants is infinite cannot be maintained.
(this thesis)
2. The partitioning of excited electrons to photosystems I and II is unbalanced in plants suffering from severe drought stress.
(this thesis)
3. Zinc biofortification of cereals through plant breeding is inefficient, especially in the case of wheat.
4. For the analysis of the crop physiological background of tuber size distribution in potato it is essential to analyze phenomena of tuber set and tuber bulking at the level of the individual plant.
5. Moral acceptance of techniques of genetic modification plays a much smaller role in the debate on genetically modified organisms than proponents of such techniques assume.
6. The current debate in literature on the question whether green plants are intelligent suggests that plants at least have a greater ability to perceive signals from their environment and to learn from these signals than some scientists do.

Propositions belonging to the thesis, entitled

“Why electrons get excited and how to cool them down: on the thermodynamics of photosynthesis in green plants”.

Paul Herbert Droef
Wageningen, 1 April 2009.

(imaginary example)

On the other side of this page, propositions in Dutch, if any, can be printed

Appendix 5

Protocol

[Location, date and time]

Wageningen University Auditorium
Gen. Foulkesweg 1a, Wageningen

Protocol for the thesis defence ceremony

General aspects

The thesis defence ceremony has a long tradition. It is a high point in the practice of science, where new ideas are discussed and defended at a high level in public, preferably in an international context, between newly arrived and established scientists. Wageningen University believes the ceremony should take place in the most dignified fashion possible, and has therefore established behaviour requirements for the ceremony.

The ceremony is accessible to the public and is recorded and broadcasted on WUR-TV. The broadcast can be viewed and obtained on the website of Wageningen University: wurtv.wur.nl

The video recording will be kept for three years and filed afterwards.

Wageningen University deals carefully with recorded video material and complies with all legal requirements. At Wageningen University, a Privacy Regulation is in force, which is published on the website of Wageningen University.

Conventions

The focus of the ceremony is the practice of science. It is therefore unsuitable for the doctoral candidate, paronyms of members of the thesis committee to make any religious, political or nationalistic statements by means of clothing, words, gestures or in any other way. Any other statements that do not show respect for the scientific and dignified character of the ceremony are also unsuitable.

Formal titles of address

Rector Magnificus (or his/her substitute)	Mister Rector / Chair
Doctoral thesis supervisor	Highly esteemed supervisor
Doctoral thesis co-supervisor	Highly esteemed co-supervisor
Opponents	Highly esteemed opponent

Clothing regulations

There are no emphatic clothing regulations, but compliance with the following guidelines is appreciated.

Doctoral candidate and paronyms, gentlemen: tuxedo with black shoes and black socks

Doctoral candidate and paronyms, ladies: festive clothing in subdued colours.

Thesis committee:

Professors, gentlemen: gown and cap or a dark suit with black shoes and black socks. Ladies: festive clothing in subdued colours.

Non-professors, gentlemen: dark suit or morning coat with black shoes and black socks. Ladies: festive clothing in subdued colours.

Schedule:

- 30 minutes before the beginning of the academic sitting:

Preparations:

Thesis committee goes to meeting room at the Aula to discuss opposition themes, propositions, time allocation.

Doctoral candidate, paranymphs and beadle go to the small auditorium

Public is admitted to the main auditorium

- 15 minutes before the beginning of the academic sitting:

Beadle brings the doctoral candidate and the paranymphs to the main auditorium.

The doctoral candidate makes a brief explanation of the doctoral research, the paranymphs sit at the front of the auditorium. After the explanation, the paranymphs join the doctoral candidate and stand on opposite sides of the podium.

- 2 minutes before the beginning of the academic sitting

Ceremonial procession of the thesis committee, Beadle going first; the procession is led by the Rector Magnificus or his substitute.

Thesis committee takes their seats on the podium.

The Rector Magnificus and the doctoral thesis supervisor/co-supervisor(s) seat themselves behind the table at the right to the podium (as seen from the auditorium). The primary doctoral thesis supervisor sits to the left of the Rector Magnificus, the second doctoral thesis supervisor and/or doctoral thesis co-supervisor(s) sit to the right of the Rector.

The other members of the thesis committee take their places behind the table at the left of the podium (as seen from the auditorium), in the order in which they will oppose the doctoral candidate, with the first opponent on the auditorium side.

The Beadle invites the Doctoral candidate and the paranymphs to take their places behind the lectern in the middle of the podium. The Beadle and the paranymphs take their places.

The Beadle leaves the auditorium.

- Beginning of the academic sitting

The Rector Magnificus opens the meeting by sounding the gavel and begins the ceremony as follows:

"I hereby open this ceremonial meeting, which has been called by the Doctorate Board of Wageningen University, during which (name of doctoral candidate) will be given the opportunity, in partial fulfilment of the requirements for the degree of doctor, to defend a thesis with the title '(title of thesis)' and a number of propositions against the objections of a thesis committee appointed by the Doctorate Board."

The Rector Magnificus opens the defence a ceremony by introducing the first opponent:

"I now give the floor to the first opponent, (name and job title of opponent)."

The Rector Magnificus introduces each subsequent member of the thesis committee to the doctoral candidate when they ask their first question.

The opponents discuss their objections with the doctoral candidate during the time that is allocated, which is monitored by the Rector Magnificus.

- 45 minutes after the beginning of the academic sitting

Beadle enters the auditorium, walks to the podium and announces that the time has elapsed with the words: "hora est".

The Rector Magnificus ensures that any continuing discussion or argument is completed, including its defence, and adjourns the meeting for consultation.

Preceded by the Beadle, the procession leaves the auditorium and enters the meeting room.

The thesis committee decides whether or not to confer the doctorate and consults on the formulation of the degree classification (*judicium*), based on the draft text provided by the doctoral thesis supervisor. In any case, the text of the degree classification also refers to the thesis defence and the propositions.

- 60 minutes after the beginning of the academic sitting

The procession enters the auditorium, preceded by the Beadle. Everyone takes their places again.

The Rector Magnificus reopens the meeting and announces the decision that the thesis committee has taken on behalf of the Doctorate Board with the following words: "The Doctorate Board of Wageningen University, represented by the Rector Magnificus and [number] of individuals appointed by this Board, has decided, after studying the thesis with the title " (title of the thesis) " and the propositions, and after hearing the defence of the thesis and propositions, to confer the degree of doctor on: ...(name of doctoral candidate), and to allocate to him/her all rights and competences that, pursuant to law and custom, result, or will result, from its possession.

(if the degree is awarded cum laude: "Moreover, due to the exceptional capability in the independent practice of science shown by the candidate, the designation 'cum laude' is attached to this degree."
"By conferring this degree, the Board expects he/she has accepted the accompanying obligations, especially the obligation for the careful practice of science in accordance with the guidelines in national and international codes of conduct. I now discharge the doctoral thesis supervisor (name) from the task entrusted to him/her."

The doctoral thesis supervisor presents the degree certificate with the following words: "In accordance with the decision of the Doctorate Board of Wageningen University to confer the degree of doctor, I have the honour to present to you (name of doctoral candidate) with this degree certificate, signed by the Rector Magnificus and the doctoral thesis supervisor(s), and furnished with the Great Seal of Wageningen University. Rector Magnificus, may I now be permitted to offer my best wishes and read the *judicium*?"

The doctoral thesis supervisor presents the degree certificate and says the following words as a *judicium*: "Doctor (name of new doctor), the thesis committee has evaluated the thesis asand the defence as..."
This is followed by freely formulated congratulations.

The *judicium* and laudation (*laudatio*) last no more than 5 minutes and are businesslike in tone.

The Rector Magnificus congratulates the new doctor on behalf of the university, after which he closes the meeting. The ceremonial procession leaves the main auditorium, followed by the new doctor and the paranymphs.