

LIST OF CONTENTS

ABSTRACT	i
APPROVAL SHEET	Error! Bookmark not defined.
FOREWORD	v
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF CHART	xi
APPENDIX LIST	xii
CHAPTER 1 INTRODUCTION	1
1.1 Background.....	1
1.2 Formulation of the problem.....	3
1.3 Research purposes	3
1.4 Benefits of research	3
1.5 Originality of Research.....	4
CHAPTER II LITERATURE REVIEW.....	5
2.1 Theoretical basis.....	5
2.1.1 Traditional medicine	5
2.1.2 Jamu	8
2.1.3 Chemical Drugs (BKO).....	9
2.1.4 Thin Layer Chromatography (TLC).....	13
2.1.5 HPLC (high performance liquid chromatography)	17
2.2 Theoretical Framework	23
2.3 Conceptual Framework	24
2.4 Hypothesis	24
CHAPTER III RESEARCH METHODS	25
3.1 Types and Design of Research	25
3.2 Time and Place of Research	25
3.3 Population and Sample	25
3.4 Research Variables.....	25
3.5 Operational Definition of Variables.....	26
3.6 Research Tools and Materials.....	26

3.7	Work procedures.....	26
3.7.1	Making Reagent Solutions	27
3.7.2	Qualitative Analysis of Thin Layer Chromatography	27
3.7.3	High Performance Liquid Chromatography Quantitative Analysis	29
3.8	Data analysis.....	33
3.9	Research Flow Chart	34
3.10	Research Schedule.....	37
CHAPTER IV RESULTS AND DISCUSSION		38
4.1	Qualitative Analysis.....	Error! Bookmark not defined.
4.1.1	Sampling	38
4.1.2	Thin Layer Chromatography (TLC) Test	40
4.1.3	Thin Layer Chromatography Test Results.....	Error! Bookmark not defined.
4.2	Quantitative Analysis HPLC (High Performance Liquid Chromatography)	45
CHAPTER V CONCLUSION AND SUGGESTIONS		57
5.1	Conclusion.....	57
5.2	Suggestion	57
BIBLIOGRAPHY		58
ATTACHMENT		Error! Bookmark not defined.

LIST OF TABLES

Table 1. Research Authenticity	4
Table 2. Advantages of Using Thin Layer Chromatography	15
Table 3. Operational Definition of Variables	26
Table 4. Registration Number on the packaging	38
Table 5. Thin Layer Chromatography (TLC) Test Results of Paracetamol Standards and Herbal Medicine Samples	43
Table 6. Replicator Results on Standard Retention Time of Paracetamol and Herbal Medicine Samples for Muscle Pain.....	53
Table 7. Calculation Results of the content	Error! Bookmark not defined.



LIST OF FIGURES

Figure 1. Herbal Medicine Logo	6
Figure 2. Standard Herbal Medicine Logo	6
Figure 3. Phytopharmaca Logo	7
Figure 4. Chemical Structure of Dexamethasone.....	10
Figure 5. Chemical Structure of Paracetamol	11
Figure 6. Chemical Structure of Antalgin	12
Figure 7. Chemical Structure of Phenylbutazone.....	13
Figure 8. HPLC equipment	19



LIST OF CHART

Chart 1. Theoretical Framework.....	23
Chart 2. Conceptual Framework.....	24
Chart 3. Research Flow.....	36



APPENDIX LIST

Attachment 1. Sampling Place.....	Error! Bookmark not defined.
Appendix 2. Herbal Medicine Samples.....	Error! Bookmark not defined.
Appendix 3. Identification of Non-BPOM Herbal Medicines Circulating in Mantingan District, East Java	Error! Bookmark not defined.
Appendix 4. Tools used in research.....	Error! Bookmark not defined.
Appendix 5. Image of Making Sample Solution for Herbal Medicine for Muscle Pain.....	Error! Bookmark not defined.
Appendix 6. HPLC results	Error! Bookmark not defined.
Appendix 7. Identification of Paracetamol Standards and Samples	Error! Bookmark not defined.
Appendix 8. Data for Calculation of Paracetamol Standard Rf Value and Herbal Medicine Sample Rf.....	Error! Bookmark not defined.
Appendix 9. Sample Content Calculation Data	Error! Bookmark not defined.