A new approach to substituted piperideines
by Joseph Alan Dibbern

A thesis submitted in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE in Chemistry
Montana State University

Abstract:
The Beckmann and Mundy N-acyllactam rearrangements are utilized to develop a new synthetic approach to alkylated piperideines. A consequence of this work is a new synthesis of coniine.

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Date 6/17/81

to
my parents

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Approved:

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MONTANA STATE UNIVERSITY
Bozeman, Montana

June, 1981

ACKNOWLEDGMENT

I would like to acknowledge the National Science Foundation (ISP - 801149) for its support of Dr. B. P. Mundy's and my research endeavors and the Department of Chemistry at Montana State University for its financial support by way of teaching assistantships and tuition waivers. I would like to thank Dr. Mundy for his support, guidance and gentle prodding when my mind wandered from my research. I would also like to thank Dr. Mundy, Steve Glancy and "Youseungi-san" Kim for their tolerance of my incessant questions. Most importantly I would like to thank my wife for her support and acceptance of my "ornery and owly" after-work disposition.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

The Beckmann and Mundy N-acyllactam rearrangements are utilized to develop a new synthetic approach to alkylated piperideines. A consequence of this work is a new synthesis of coniine.

INTRODUCTION

The primary objective of this endeavor was to find an improved method for synthesizing alkylated imines. A general schematic of the proposed methodology is shown below (Figure 1). All yields and further

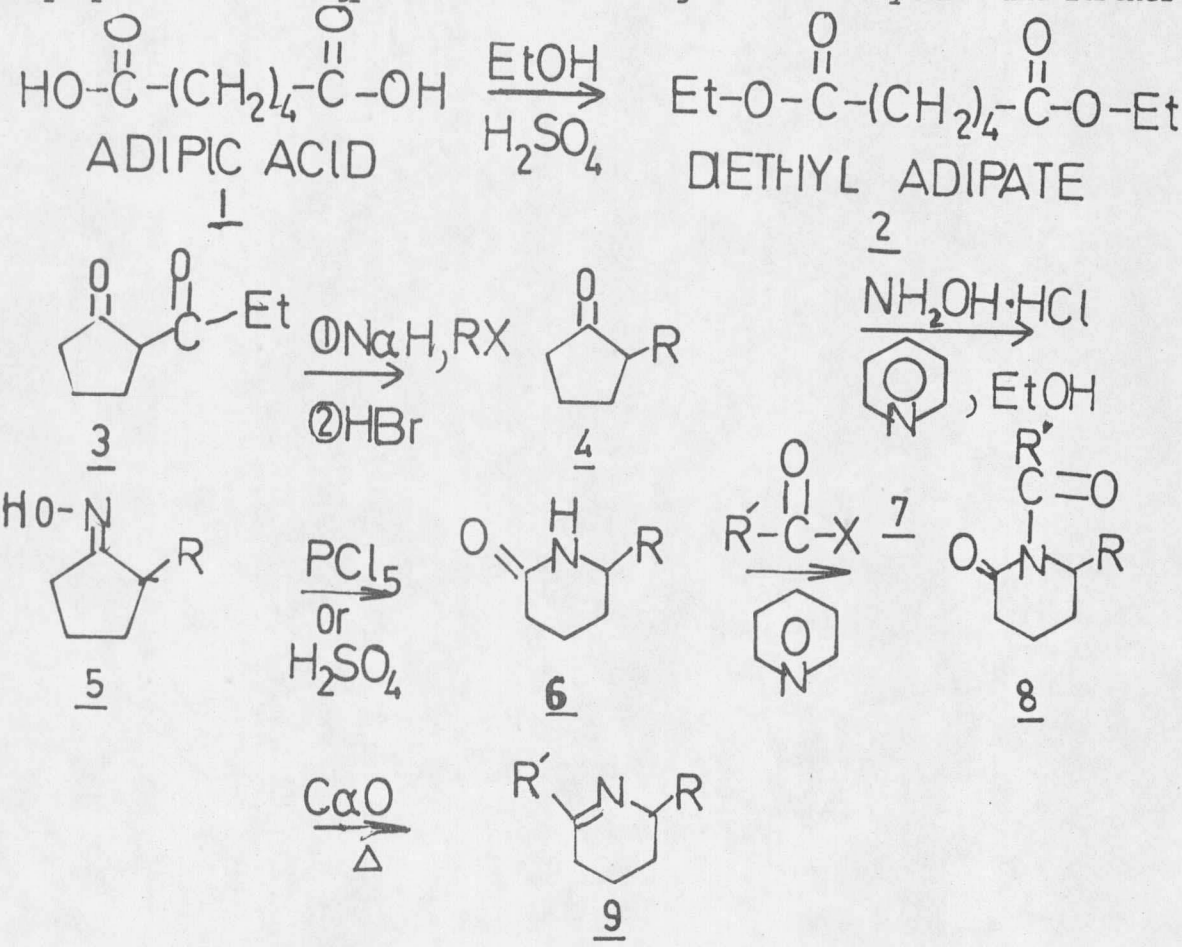
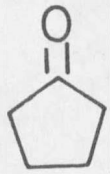


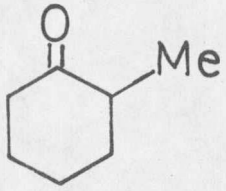
Figure 1. Proposed synthetic methodology

information concerning reaction conditions are reported in the experimental section.

At steps 4 and 5 structurally similar stock chemicals 10 and 11 were used as model compounds to avoid drastic loses of precious synthesized material in alternately tested pathways. When the best



10



11

reaction pathway was found the synthesized reagents were used.