

ORCHID MAINTENANCE USING FUZZY LOGIC

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ABSTRACT

This paper proposes a maintenance system using fuzzy logic technique by mapping the knowledge and experience of traditional way of maintaining orchids. Fuzzy logic control, which is similar to the human way of thinking, has emerged as the most active tool in autocratic control. The purpose of fuzzy logic controller is to automatically achieve and maintain some desired state of a system and process by monitoring system variables as well as taking appropriate control action. The maintenance process covers watering and ventilation. This basic maintenance will provide the best possible growing environment to achieve healthy growth and good bloom production.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION TO THE SYSTEM

Orchid is the most beautiful, exotic and mysterious flower in the world [1]. There are more than 25 000 species of orchids estimated worldwide. People all over the world have been talking about orchid for over 100 years ago. For centuries they have served as symbols of love, beauty and luxury.

There are two pattern of orchid growth which is sympodial and monopodial. Sympodial is a form of growth in orchid where the plant produces new shoots that grow up from root-bearing stem whereas monopodial is a form of growth where the plant keeps growing from the tip. Figure 1 and Figure 2 show the details about orchids' anatomy.

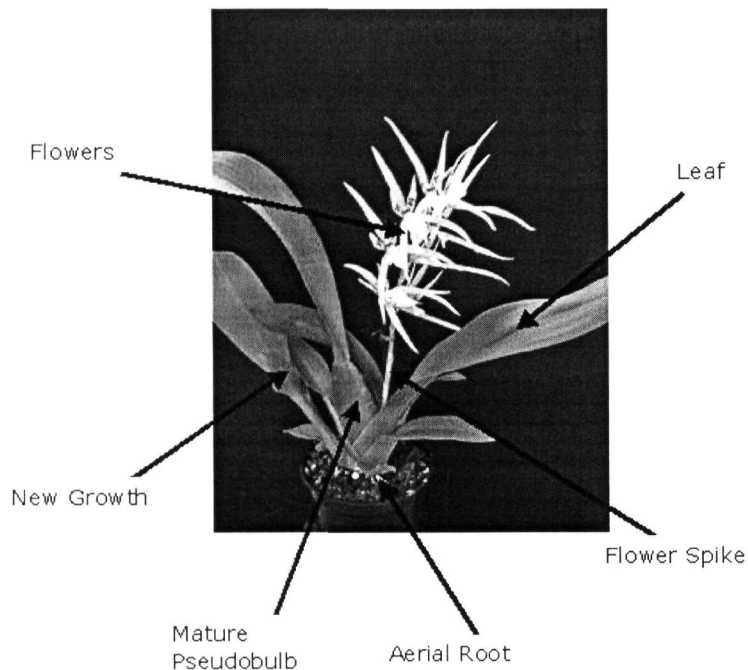


Figure 1.1: Anatomy of Monopodial Orchid