CONTENTS

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Disease in ecological sys
propose and analyze a
affected by infectious di
the prey population and
population. We derive bi
as well as epidemiologica
of the proposed system.
without disease but hig
tion. We also observe th
eradicate into the comm
sis of the interior equili
out. To study the global
Our simulation results s
population the predator
that predation rates spe
predator play crucial ro
disease propagation.

Keywords: Prey; predat
oscillation; treatment.

1. Introduction

Ecology and epidemiolog
are some common featur
interesting dynamics. Ec
in mathematical biology