

TABLE OF CONTENTS

FOREWORD.....	i
PREFACE.....	ii
DECENTRALIZED ENERGY AND A DEMOCRATIZED ECONOMY: PLANNING FOR THE FUTURE Conner Bailey.....	1
RESEARCH AND DEVELOPMENT ON UTILIZATION OF CROPS FOR BIO-ENERGY IN MALAYSIA Ghizan Saleh and N. Rajanaidu.....	7
BIOFUEL BASED ON OIL PALM FEEDSTOCK: CURRENT RESEARCH AND DEVELOPMENT IN IOPRI Tjahjono Herawan, Frisda R. Panjaitan, Meta Rivani.....	9
CHALLENGING SUSTAINABLE FOOD AND BIOENERGY PRODUCTION IN INDONESIA Edi Santosa.....	12
USE OF HERBICIDES IN AGRICULTURE – AND SOME OF MY RESEARCH Glenn Wehtje.....	14
A SUSTAINABLE MODEL ON PROCESSING SLAUGHTER HOUSE WASTE Nurzainah Ginting.....	15
OPTIMISATION OF THE PROCESS OF PALM BIODIESEL PRODUCTION Renita Manurung.....	20
USING AGRICULTURAL WASTE AS A RENEWABLE BIOENERGY RESOURCES FOR SUSTAINABLE AGRICULTURE AND ENERGY RESOURCES Suddin Simandjuntak.....	27
SHADE TOLERANCES OF SOYBEAN VARIETIES Lisa Mawarni.....	35

YIELD OF SWEET POTATOES CULTIVATED ON EX COARSE GRASS GROWN SOIL Haryati.....	41
DESIGN OF BIOGAS ELECTRICITY GENERATOR PILOT PLANT BY COW-PALM PLANTATION INTEGRATION Irvan, Bambang Trisakti, Fahmi, Yusuf Husni, and Nevi Diana Hanafi.....	47
STUDY OF EXTRACTION AND IDENTIFICATION OF 1'ACETOXY CHAVICOL ACETATE FROM LOCAL <i>Alpinia galanga</i> L. (Sw) RHIZOME EXTRACTS BY CHLOROFORM BASED ON VARIETY, HARVESTING TIME, AND VARIATION OF EXTRACTION TIME, AND ACTIVITIES TO A 549 CANCER CELL LINE OF HUMAN Herla Rusmarilin.....	56
ROLE OF APICULTURE (<i>Apis mellifera</i>) FOR SUPPORTS SUSTAINABILITY IN AGRICULTURAL PRODUCTIVITY Dwi Endah Widyastuti, Ma'rifatin Zahra and Kansih Sri Hartini.....	66
STUDY OF ANTIOXIDANT ACTIVITY OF 1'ACETOXY CHAVICOL ACETATE OF LOCAL RED <i>Alpinia galanga</i> L. (Sw) RHIZOME EXTRACTS AND <i>IN VIVO</i> TOXICITY TEST Herla Rusmarilin.....	76
ORGANIC AND INORGANIC FERTILIZER APPLICATION ON SOME VARIETIES OF GREEN BEAN (<i>Phaseolus radiatus</i>) Wan Arfiani Barus and Bakhtiar Harun.....	86
RESPONSE OF PEGAGAN (<i>Centella asiatica</i> L.) TO COMPOST AND LIQUID ORGANIC FERTILIZER Noverita S. Vinolina.....	95
BIOCONVERSIONS OF MIXTURES OF PALM KERNEL CAKE AND RICE BRAN BY <i>TRICHODERMA VIRIDE</i> TOWARD NUTRITIONAL CONTENTS Sukaryana, Y., U. Atmomarsono., V.D. Yuniyanto., E. Supriyatna.....	108



**GROWTH AND PRODUCTION RESPONS OF GINGER
(*Zingiber officinale* Rosc.) TO SOLID ORGANIC
FERTILIZER AND COMPOSITION OF PLANTING MEDIA**

✓ Hapsoh, Yaya Hasanah and Nini Rahmawati.....

119

**GROWTH AND YIELD OF EGGPLANT ON GIBBERELLIN
AND NITROGEN PHOSPHATE POTASSIUM (NPK)
COMPOUND FERTILIZER APPLICATION**

Jonatan Ginting.....

125

**MANAGEMENT OF INCEPTISOLS IN SAMADUA
SUBDISTRICT OF SOUTH ACEH GROWN WITH RED
PEPPER (*CAPSICUM ANNUM* L) BY APPLICATION OF
CASTING AND SALTY ASH**

Kemala Sari Lubis, M. Madjid B Damanik and Handayani
Nury.....

132