

**INDEKS BIOLOGI DAN PERTANIAN INDONESIA**  
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Kepala Pusat Perpustakaan dan  
Penyebaran Teknologi Pertanian

**Kata Pengantar**

Indeks Biologi dan Pertanian Indonesia ini terbit dua nomor setahun, berisi judul-judul karangan mengenai biologi dan pertanian di Indonesia yang dimuat dalam berbagai penerbitan dalam maupun luar negeri.

Indeks ini disusun menurut skema pembagian subyek dari AGRIS (The International Information System for Agricultural Sciences and Technology) dan masing-masing entri dilengkapi dengan kata kunci yang menggambarkan isi karangan. Kata kunci ini diambil dari AGROVOC edisi ke-4 tahun 1999, dan dipakai pula untuk indeks subyeknya.

Untuk menelusuri suatu karangan yang diinginkan, pengguna dapat mencarinya dari indeks pengarang dan indeks subyek. Daftar majalah dari karangan-karangan yang dimuat dalam indeks ini juga disertakan.

Semua karangan yang ada di dalam indeks ini ada di Pusat Perpustakaan dan Penyebaran Teknologi Pertanian, dan pengguna yang memerlukan karangan aslinya dapat menghubungi alamat dari Pusat tersebut.

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**AGRICULTURAL DEVELOPMENT; RESEARCH; PLANNING; HUMAN RESOURCES; SUMATRA.**

0602 PUSAT PENELITIAN SOSIAL EKONOMI PERTANIAN. Enhancing performance by improving the accountability of agricultural research in Indonesia/Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 1998 124 p. 4 ill., 16 tables; 20 ref.

**INDONESIA; RESEARCH; AGRICULTURAL DEVELOPMENT; NATURAL RESOURCES; HUMAN RESOURCES.**

0603 SUDARYANTO, T. [Role of Assessment Institute for Agricultural Technology dissemination of marine and coastal]. Peran BPTP dalam diseminasi teknologi budidaya laut dan pantai /Sudaryanto, T.; Rusasta, I.W.; Syam, A. (Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia)). [Proceeding on National Seminar: Research and Dissemination of Marine and Coastal]. Prosiding Seminar Nasional Penelitian dan Diseminasi Teknologi Budidaya Laut dan Pantai/Suradjat, A.; Heruwati, E.S.; Wahyudi, N.A.; Astuti, I.R. (Eds.). Pusat Penelitian dan Pengembangan Perikanan, Jakarta (Indonesia). Jakarta (Indonesia): PUSLITBANGKAN, 1999 p. 73-82 2 ill., 2 tables; 9 ref.

**RESEARCH INSTITUTIONS; MILKFISH; AQUACULTURE; CRABS; APPROPRIATE TECHNOLOGY; TECHNOLOGY TRANSFER.**

**E10 AGRICULTURAL ECONOMICS AND POLICIES / EKONOMI DAN KEBIJAKSANAAN NASIONAL MENGENAI PERTANIAN**

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**MALUKU; ECONOMIC VALUE; FISHING OPERATIONS; RECREATION.**

0606 PUSAT PENELITIAN SOSIAL EKONOMI PERTANIAN. [Economic crises on market structure of agricultural workers in rural areas. Dampak krisis ekonomi terhadap struktur pasar tenaga kerja pertanian di pedesaan: Laporan Penelitian/Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 2000 96 p. 3 ill., 27 tables

**SUMATRA; JAVA; ECONOMIC CRISES; HOUSEHOLDS; MIGRATION; MARKETS; WORKERS; RURAL AREAS.**

0607 SOEDJITO, B.B. A framework for infrastructure investment in agriculture/Soedjito, B.B. [Research Result Report of Workshop on

Reposition of Agricultural Sector to National Economic]. Laporan Hasil Kegiatan Lokakarya Reposisi Sektor Pertanian Menjadi Andalan Ekonomi Nasional/Pusat Penelitian Sosial Ekonomi Pertanian Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (pt. 3) 8 p.

AGRICULTURAL PRODUCTS; AGRO-INDUSTRIAL SECTOR; DOMESTIC TRADE; AGRICULTURAL SECTOR; INFRASTRUCTURE; INDONESIA.

0608 SURYANA, A. [Perspective of KCl fertilizer subsidy and rice price policy on rice production and farm income]. Perspektif subsidi pupuk KCl dan kebijaksanaan harga gabah terhadap produksi padi dan pendapatan petani/ Suryana, A.; Erwidodo; Mardianto, S. [Analysis and Perspective of Agricultural Development Policy in Post Economic Crises]. Analisis dan Perspektif Kebijaksanaan Pembangunan Pertanian Pasca Krisis Ekonomi /Sudaryanto, T.; Russtra, I W.; Jamal, E. (Eds.) Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (no. 20) p. v-xxiii 4 tables

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0609 SYAFA'AT, N. [Perspective of rice economic policy in short and middle term scale]. Perspektif kebijaksanaan ekonomi beras jangka pendek dan menengah/Syafa'at, N.; Rachmat, M.; Russtra, I W. [Analysis and Perspective of Agricultural Development Policy in Post Economic Crises]. Analisis dan Perspektif Kebijaksanaan Pembangunan Pertanian Pasca Krisis Ekonomi/Sudaryanto, T.; Russtra, I W.; Jamal, E. (Eds.) Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (no. 20) p. v-xxiii 5 tables

RICE; ECONOMIC POLICIES; ECONOMIC SITUATION; INDONESIA.

0610 YUSDJA, Y. Analysis of increasing policy of milk competition after economic crises]. Analisis kebijaksanaan peningkatan daya saing susu sapi setelah krisis moneter/Yusdja,

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MILK; PRODUCTION INCREASE; MONETARY POLICIES; DAIRY INDUSTRY; ECONOMIC COMPETITION; ECONOMIC CRISES.

## E11 LAND ECONOMICS AND POLICIES / EKONOMI DAN KEBIJAKSANAAN NASIONAL MENGENAI LAHAN

0611 ABDURACHMAN, A. [The opportunity of soybean extensification for support Gema Palagung 2001 program]. Peluang perluasan areal pertanaman kedelai untuk mendukung Gema Palagung 2001/Abdurachman, A.; Mulyani, A.; Sastramihardja, H. (Pusat Penelitian Tanah dan Agroklimat, Bogor (Indonesia)). [Strategy of Soybean Production Development]. Strategi Pengembangan Produksi Kedelai: Prosiding Lokakarya Pengembangan Produksi Kedelai Nasional/Sunarlism, N.; Pasaribu, D.; Sunihardi (Eds.) Pusat Penelitian dan Pengembangan Tanaman Pangan, Bogor (Indonesia). Bogor (Indonesia): PUSLIT-BANGTAN, 1999 p. 23-36 4 ref. Appendices

SOYBEANS; EXTENSIFICATION; LAND SUITABILITY; DEVELOPMENT POLICIES.

0612 KARIM, A. Land suitability criterion evaluation of organic Arabica coffee on andisol in Central Aceh. Evaluasi kriteria kesesuaian lahan kopi Arabika organik pada tanah andisol di Aceh Tengah/Karim, A. (Universitas Syiah Kuala Darussalam, Banda Aceh (Indonesia). Fakultas Pertanian); Wiradisastra, U.S.; Sudarsono. Jurnal Agrista (Indonesia) ISSN 1410-3389 (1999) v. 3(3) p. 191-200 2 ill., 2 tables; 13 ref. Summary (En)

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0613 MUNIR, A. [Application of geographic information system (SIG-IDRIS) for soil erosion estimation]. Aplikasi sistem informasi geografis (SIG-IDRIS) untuk penaksiran erosi tanah/Munir, A. (Universitas Hasanuddin, Makasar (Indonesia)); Saripin; Achmad, M. [Proceedings of the National Seminar and Seventh Congress of Agricultural Technique Association]. [Prosiding Seminar Nasional dan Kongres 7 Perhimpunan Teknik Pertanian (PERTETA). V. 4/Susanto, B.; Rahardjo, B.; Purwadi, T. (Eds.). Yogyakarta (Indonesia): UGM, 1999 p. 210-218 3 ill., 4 tables; 11 ref. Summary (In)

LAND USE; EROSION; GEOGRAPHY; INFORMATION SYSTEMS.

0614 SIMATUPANG, R.S. [Perspective of sleeping land utilization to increase rice production in tidal swamp land]. Perspektif pemanfaatan lahan terlantar untuk peningkatan produksi padi di lahan rawa pasang surut/Simatupang, R.S.; Nurita; Indrayati, L. (Balai Penelitian Tanaman Pangan Lahan Rawa, Banjarbaru (Indonesia)). [Proceedings of the Seminar on Increasing National Rice Production Through Tabela (Direct Sowing) System of Lowland Rice and Utilization of Unproductive Land]. Prosiding Seminar Peningkatan Produksi Padi Nasional Melalui Sistem Tabela Padi Sawah dan Pemanfaatan Lahan Kurang Produktif/Sriyani, N.; Widodo, S.E.; Kamal, M.; Karyanto, A.; Setiawan, K.; Sembodo, D.R.J.; Pramono, E.; Hadi, M.S. (Eds.). Himpunan Ilmu Gulma Indonesia Komda Lampung; Perhimpunan Agronomi Indonesia Komisariat Lampung; Universitas Lampung, Bandar Lampung (Indonesia). Bandar Lampung (Indonesia): HIGI; Peragi, 1999 p. 382-388 6 tables; 18 ref. Summary (En)

ORYZA SATIVA; LAND USE; ABANDONED LAND; PRODUCTION INCREASE; RECLAMATION; TILLAGE; SWAMP SOILS; SOIL CHEMICO PHYSICAL PROPERTIES.

## E12 LABOUR AND EMPLOYMENT / TENAGA KERJA DAN KEMAMPUAN KERJA

0615 SYAFA'AT, N. [Analysis of the push on labor migration from rural areas in Indonesia].

Analisis faktor-faktor pendorong imigrasi angkatan kerja pedesaan di Indonesia/Syafa'at, N.; Susilowati, S.H.; Hidayat, D. (Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia)). Jurnal Agro Ekonomi (Indonesia) ISSN 0216-9053 (1998) v. 17(2) p. 80-97 10 tables; 15 ref. Summaries (En, In)

INDONESIA; RURAL AREAS; LABOUR; EMPLOYMENT; RURAL URBAN MIGRATION.

## E13 INVESTMENT, FINANCE AND CREDIT / INVESTASI, KEUANGAN DAN KREDIT

0616 SWASTIKA, D.K.S. [Farmer response to erasing policy on fertilizers subsidy and increasing of rice floor price]. Respon petani terhadap kebijaksanaan penghapusan subsidi pupuk dan kenaikan harga dasar gabah/Swastika, D.K.S.; Sumaryanto; Ilham, N.; Supriatna, A. [Analysis and Perspective of Agricultural Development Policy in Post Economic Crises]. Analisis dan Perspektif Kebijaksanaan Pembangunan Pertanian Pasca Krisis Ekonomi /Sudaryanto, T.; Rusastra, I W.; Jamal, E. (Eds.). Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (no. 20) p. v-xxiii 7 tables. Appendices

RICE; FERTILIZERS; SUBSIDIES; FARMERS; PRICE POLICIES; TECHNOLOGY TRANSFER; MARKETING.

0617 SWASTIKA, D.K.S. [Supplying and distribution of fertilizer in post deregulation policy on December 1998]. Pengadaan dan distribusi pupuk pasca deregulasi kebijaksanaan Desember 1998/Swastika, D.K.S.; Ilham, N.; Supriatna, A. [Analysis and Perspective of Agricultural Development Policy in Post Economic Crises]. Analisis dan Perspektif Kebijaksanaan Pembangunan Pertanian Pasca Krisis Ekonomi /Sudaryanto, T.; Rusastra, I W.; Jamal, E. (Eds.). Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (no. 20) p. v-xxiii 2 ill., 13 tables. Appendices

INDONESIA; FERTILIZER DISTRIBUTORS; PRICE POLICIES; TRADE POLICIES.

0618 SYUKUR, M. [Effectivity of agriculture credit and its completing alternative for agricultural development]. Kinerja kredit pertanian dan alternatif penyempurnaannya untuk pengembangan pertanian/Syukur, M.; Sumaryanto; Sumedi. [Analysis and Perspective of Agricultural Development Policy in Post Economic Crises]. Analisis dan Perspektif Kebijaksanaan Pembangunan Pertanian Pasca Krisis Ekonomi/Sudaryanto, T.; Rusastra, I W.; Jamal, E. (Eds.) Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (no. 20) p. v-xxiii 12 tables

INDONESIA; CREDIT; AGRICULTURAL DEVELOPMENT; FARM INCOME; LAND OWNERSHIP; AGRICULTURAL WORKERS.

#### **E14 DEVELOPMENT ECONOMICS AND POLICIES / EKONOMI DAN KEBIJAKSANAAN PEMBANGUNAN**

0619 ANWAR, A. [Reposition of agricultural sector on national economic development]. Reposisi sektor pertanian dalam pembangunan ekonomi nasional/Anwar, A. [Research Result Report of Workshop on Reposition of Agricultural Sector to National Economic]. Laporan Hasil Kegiatan Lokakarya Reposisi Sektor Pertanian Menjadi Andalan Ekonomi Nasional/Pusat Penelitian Sosial Ekonomi Pertanian Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (pt. 5 ) Numerical data

INDONESIA; AGRICULTURAL SECTOR; ECONOMIC DEVELOPMENT; PRODUCTION DATA.

0620 PUSAT PENELITIAN SOSIAL EKONOMI PERTANIAN. [Increasing of credit role in agribusiness support in rural areas. Peningkatan peranan kredit dalam menunjang agribisnis di pedesaan: Laporan Penelitian/Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 2000 96 p. 11 tables

INDONESIA; CREDIT; AGRICULTURAL SECTOR; ROLE OF WOMEN; AGRO-INDUSTRIAL SECTOR; RURAL AREAS; ECONOMIC DEVELOPMENT.

0621 RAIHAN, S. [Potential, problem, and development prospect of rice in South Kalimantan, Indonesia]. Potensi, masalah, dan peluang pengembangan padi lebak di Kalimantan Selatan/Raihan, S.; Sjachrani, Rina, Y. (Balai Penelitian Tanaman Pangan Lahan Rawa, Banjarbaru (Indonesia)). [Proceedings of the Seminar on Increasing National Rice Production Through Tabela (Direct Sowing) System of Lowland Rice and Utilization of Unproductive Land]. Prosiding Seminar Peningkatan Produksi Padi Nasional Melalui Sistem Tabela Padi Sawah dan Pemanfaatan Lahan Kurang Produktif/Sriyani, N.; Widodo, S.E.; Kamal, M.; Karyanto, A.; Setiawan, K.; Sembodo, D.R.J.; Pramono, E.; Hadi, M.S. (Eds.) Himpunan Ilmu Gulma Indonesia Komda Lampung; Perhimpunan Agronomi Indonesia Komisariat Lampung; Universitas Lampung, Bandar Lampung (Indonesia). Bandar Lampung (Indonesia): HIGI; Peragi, 1999 p. 389-392 1 table; 6 ref. Summary (En)

ORYZA SATIVA; LESS FAVOURED AREAS; PRODUCTION INCREASE; FARM INPUTS; TRADITIONAL FARMING; PRODUCTIVITY; APPROPRIATE TECHNOLOGY; INNOVATION ADOPTION; KALIMANTAN.

#### **E16 PRODUCTION ECONOMICS / EKONOMI PRODUKSI**

0622 MANURUNG, R.H. [The program of soybean self sufficient 2001 (Gema Palagung 2001). Program pencapaian swasembada kedelai 2001 (Gema Palagung)/Manurung, R.H. (Direktorat Bina Produksi Tanaman Pangan, Jakarta (Indonesia)). [Strategy of Soybean Production Development]. Strategi Pengembangan Produksi Kedelai: Prosiding Lokakarya Pengembangan Produksi Kedelai Nasional/Sunarlim, N.; Pasaribu, D.; Sunihardi (Eds.) Pusat Penelitian dan Pengembangan Tanaman Pangan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGTAN, 1999 p. 37-48 10 tables

SOYBEANS; SELF SUFFICIENCY; DEVELOPMENT POLICIES; VARIETIES; PRODUCTION DATA; PRODUCTION POSSIBILITIES.

0623 PUSAT PENELITIAN SOSIAL EKONOMI PERTANIAN [Assessment of main agricultural products competitiveness in free market era]. Laporan hasil penelitian pengkajian daya saing produk pertanian utama dalam era pasar bebas/Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 185 p. 4 ill., 49 tables; Bibliography (p. 134-136)

SOYBEANS; ONIONS; CLOVES; AGRICULTURAL PRODUCTS; MARKET RESEARCH; IMPORTS; DOMESTIC TRADE; ECONOMIC ANALYSIS.

**E20 ORGANIZATION, ADMINISTRATION, AND MANAGEMENT OF AGRICULTURAL ENTERPRISES ON FARMS / ORGANISASI, ADMINISTRASI DAN PENGELOLAAN PERUSAHAAN PERTANIAN/USAHA TANI**

0624 ADNYANA, M.K. Farming systems research in Indonesia: lessons, learnt and future direction/Adnyana, M.O. Learning from the farming systems research experiences in Indonesia: proceedings of CASER-JIRCAS international workshop/Goto, J.; Mayrowani, H. (Eds.). Tsukuba, Ibaraki (Japan): JIRCAS, 2000 p. 19-35. JIRCAS Working Report (Japan) ISSN 1341-710X (2000) (no. 18) 2 tables; 48 ref.

INDONESIA; FARMING SYSTEMS; RESEARCH; SMALL FARMS; SUSTAINABILITY.

0625 ADNYANA, M.O. Farming systems research in South Sumatra: lessons learnt and implications/Adnyana, M.O.; Kariyasa, K. Learning from the Farming Systems Research Experiences in Indonesia: Proceedings of CASER-JIRCAS International Workshop/Goto, J.; Mayrowani, H. (Eds.). Tsukuba, Ibaraki (Japan): JIRCAS, 2000 p. 107-116. JIRCAS Working Report (Japan) ISSN 1341-710X (2000) (no. 18) 5 tables; 17 ref.

SUMATRA; FARMING SYSTEMS; RESEARCH; SWAMP SOILS; AGRO-INDUSTRIAL SECTOR; SWAMP SOILS.

0626 ALIUDIN. [Study of vegetable-based farming system]. Sistem usaha tani berbasis sayuran: laporan hasil pengkajian/Aliudin; Djaafar, T.F.; Widodo, S.; Suharno, Sujono; Maryati; Wiryatmi (Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia)). Yogyakarta (Indonesia): IPPTP, 1997 36 p. 23 tables; 23 ref.

SHALLOTS; FARMING SYSTEMS; AGRO-INDUSTRIAL SECTOR; POSTHARVEST TECHNOLOGY; CHEMICOPHYSICAL PROPERTIES; STORAGE LOSSES.

0627 ALIUDIN. [Financial analysis of farming systems and land productivity of some vegetable crops on lowland field with monoculture and rotational cropping system]. Analisa usaha tani finansial dan produktivitas lahan beberapa jenis sayuran dataran rendah pada pola monokultur dan tumpang gilir/Aliudin; Widodo, S. (Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia)). [Proceedings of Scientific Seminar and Workshop of Technology on Specific Location for Agricultural Developing with Agrobusiness Orientation]. Prosiding Seminar Ilmiah dan Lokakarya Teknologi Spesifik Lokasi dalam Pengembangan Pertanian dengan Orientasi Agribisnis/Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). Yogyakarta (Indonesia): IPPTP, 1998 p. 124-132 3 tables, 9 ref. Summary (In)

VEGETABLE CROPS; MONOCULTURE; ROTATIONAL CROPPING; MIXED FARMING; COST BENEFIT ANALYSIS; YIELDS; FARM INCOME; LAND USE; LOWLAND.

0628 ANWAR, E.K. [Potential and performance of farming system in tidal swamp area in Air Sugihan Kiri, South Kalimantan (Indonesia)]. Potensi dan keragaman sistem usaha pertanian di lahan pasang surut Air Sugihan Kiri Sumatera Selatan/Anwar, E.K. (Pusat Penelitian Tanah dan Agroklimat, Bogor (Indonesia)). [Proceedings of the Seminar on Increasing National Rice Production Through Tabela (Direct Sowing) System of Lowland Rice and Utilization of Unproductive Land]. Prosiding Seminar Peningkatan Produksi Padi Nasional Melalui Sistem Tabela Padi Sawah dan Pemanfaatan Lahan Kurang Produktif/Sriyani,

N.; Widodo, S.E.; Kamal, M.; Karyanto, A.; Setiawan, K.; Sembodo, D.R.J.; Pramono, E.; Hadi, M.S. (Eds.) Himpunan Ilmu Gulma Indonesia Komda Lampung; Perhimpunan Agronomi Indonesia Komisariat Lampung; Universitas Lampung, Bandar Lampung (Indonesia). Bandar Lampung (Indonesia): HIGI; Peragi, 1999 p. 351-357 1 ill., 4 tables; 6 ref. Summary (En)

FOOD CROPS; FARMING SYSTEMS; FARM INPUTS; EXTENSION ACTIVITIES; FARM INCOME; QUALITY OF LIFE; SWAMP SOILS; SUMATRA.

0629 BATUBARA, I. [Animal husbandry enterprise: between bureaucracy demand and professionalism]. Perjan peternakan antara tuntutan birokrasi dan profesionalisme/Batubara, I. (Direktorat Jenderal Peternakan, Jakarta (Indonesia)). Agribisnis Peternakan (Indonesia) (1999) (v. 3) p. 48-50

INDONESIA; ANIMAL HUSBANDRY; ENTERPRISES.

0630 CALDWELL, J.S. Farming systems research: evolution, issues, and new directions building on 25 years of contributions/Caldwell, J.S. Leaning from the farming systems research experiences in Indonesia: proceedings of CASER-JIRCAS international workshop/Goto, J.; Mayrowani, H. (Eds.). Tsukuba, Ibaraki (Japan): JIRCAS, 2000. p. 1-18 JIRCAS Working Report (Japan) ISSN 1341-710X (2000) (no. 18) 4 tables; 36 ref.

INDONESIA; FARMING SYSTEMS; EVOLUTION; RESEARCH; MARKETS.

0631 DIMYATI, A. Technology and farming systems approach/Dimyati, A. Learning from the Farming Systems Research Experiences in Indonesia: Proceedings of CASER-JIRCAS International Workshop/Goto, J.; Mayrowani, H. (Eds.). Tsukuba, Ibaraki (Japan): JIRCAS, 2000 p. 57-63. JIRCAS Working Report (Japan) ISSN 1341-710X (2000) (no. 18) 3 ill.

INDONESIA; FARMING SYSTEMS; TECHNOLOGY; AGROINDUSTRIAL SECTOR.

0632 GOTO, J. A follow-up socio-economic study of the banana based farming systems research project in Cibinong, Cianjur, West Java/Goto, J.; Mayrowani, H.; Agustian, A. Learning from the Farming Systems Research Experiences in Indonesia: Proceedings of CASER-JIRCAS International Workshop/Goto, J.; Mayrowani, H. (Eds.). Tsukuba, Ibaraki (Japan): JIRCAS, 2000 p. 87-100. JIRCAS Working Report (Japan) ISSN 1341-710X (2000) (no. 18) 3 ill., 6 tables; 6 ref.

BANANAS; FARMING SYSTEMS; RESEARCH; SOCIOECONOMIC DEVELOPMENT; ON-FARM RESEARCH; FOOD SECURITY; SURVEYS.

0633 GUNTORO, S. [Ergonomy in agriculture: A thinking of agriculture in the future]. Ergonomi dalam pertanian: Suatu pemikiran tentang pertanian masa depan/Guntoro, S. Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Denpasar (Indonesia). Denpasar (Indonesia): Biro Bina Perekonomian Sekda Bali, 1999 28 p. 10 ill., 22 ref.

INDONESIA; ERGONOMICS; FARM EQUIPMENT; HARVESTING; MECHANICAL METHODS; HARVESTING LOSSES; TRANSPORT.

0634 HERMANTO. Institutional framework and restructuring/Hermanto. Leaning from the Farming Systems Research Experiences in Indonesia: Proceedings of CASER-JIRCAS International Workshop/Goto, J.; Mayrowani, H. (Eds.). Tsukuba, Ibaraki (Japan): JIRCAS, 2000 p. 53-56. JIRCAS Working Report (Japan) ISSN 1341-710X (2000) (no. 18)

INDONESIA; FARMING SYSTEMS; RESEARCH; RESEARCH INSTITUTIONS.

0635 HERMAWAN, A. [Partnership in agricultural sector: to overcome the economic crises]. Kemitraan usaha sektor pertanian: upaya mengatasi krisis ekonomi/Hermawan, A.; Hermanto; Prasetyo, T. (Balai Pengkajian Teknologi Pertanian, Ungaran (Indonesia)). [Proceedings of Workshop on Agricultural Partnership and Expose of Current Technology Resulted from Estate Research]. Lokakarya Kemitraan Pertanian dan Ekspos Teknologi

Mutakhir Hasil Penelitian Perkebunan/Balai Pengkajian Teknologi Pertanian, Ungaran (Indonesia). Ungaran (Indonesia): BPTP, 1998 (pt. 4) 17 p. 29 ref.

INDONESIA; AGRICULTURAL SECTOR; ECONOMIC DEPRESSION; PARTNERSHIPS.

0636 MARTAAMIDJAJA, A.S. Challenges for today's research and extension community/Martaamidjaja, A.S.. Learning from the Farming Systems Research Experiences in Indonesia: Proceedings of CASER-JIRCAS International Workshop Goto, J.; Mayrowani, H. (Eds.). Tsukuba, Ibaraki (Japan): JIRCAS, 2000 p. 65-72. JIRCAS Working Report (Japan) ISSN 1341-710X (2000) (no. 18) 6 ill.

INDONESIA; FARMERS; AGRICULTURAL DEVELOPMENT; DEVELOPMENT POLICIES; ADVISORY OFFICERS; PRIVATE SECTOR.

0637 MUDJISIHONO, R. [Study on farming system base on ecoregional dryland in Gunung Kidul (Indonesia) district 1998/1999]. Hasil pengkajian sistem usaha pertanian berbasis ekoregional lahan kering di Kabupaten Gunung Kidul th. anggaran 1998/1999/Mudjisihono, R.; Santosa, T.; Thamrin, M.; Djaafar, T.F.; Hendrata, R. (Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia) Subagio. Yogyakarta (Indonesia): IPPTP, 1999 26 p. 7 tables; 15 ref. Appendices

UPLAND RICE; CULTIVATION; FARMING SYSTEMS; INNOVATION ADOPTION; YIELDS; COST BENEFIT ANALYSIS; JAVA.

0638 PUSAT PENELITIAN SOSIAL EKONOMI. [Assessment of food consumption diversification in Indonesia]. Pengkajian diversifikasi konsumsi pangan di Indonesia/Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Warta Penelitian dan Pengembangan Pertanian (Indonesia) ISSN 0126-4427 (2000) v. 22(2) p. 9-12

FOODS; FOOD CONSUMPTION; DIVERSIFICATION; INDONESIA.

0639 RACHMAN, A. Farming systems research in Indonesia: foreign assistance and commitment/Rachman, A.; Abdurachman, A. Leaning from the farming systems research experiences in Indonesia: proceedings of CASER-JIRCAS international workshop/Goto, J.; Mayrowani, H. (Eds.). Tsukuba, Ibaraki (Japan): JIRCAS, 2000 p. 37-46. JIRCAS Working Report (Japan) ISSN 1341-710X (2000) (no. 18) 2 tables; 13 ref.

LIVESTOCK; FARMING SYSTEMS; RESEARCH; TECHNOLOGY TRANSFER; SCIENTISTS; NUSA TENGGARA.

0640 RANGKUTI, H.A.R. [Increasing human resources quality in agricultural development]. Peningkatan kualitas sumberdaya manusia dalam pembangunan pertanian andalan/ Rangkuti, H.A.R. [Research Result Report of Workshop on Reposition of Agricultural Sector to National Economic]. Laporan Hasil Kegiatan Lokakarya Reposisi Sektor Pertanian Menjadi Andalan Ekonomi Nasional/Pusat Penelitian Sosial Ekonomi Pertanian Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (pt. 7) 17 p.

INDONESIA; HUMAN RESOURCES; QUALITY; AGRICULTURAL DEVELOPMENT.

0641 RUSAstra, I.W. The perspective of sustainable agriculture farming systems in imperata grassland area, Indonesia/Rusastra, I.W.; Menz, K. Learning from the Farming Systems Research Experiences in Indonesia: Proceedings of CASER-JIRCAS International Workshop/Goto, J.; Mayrowani, H. (Eds.). Tsukuba, Ibaraki (Japan): JIRCAS, 2000. p. 117-128. JIRCAS Working Report (Japan) ISSN 1341-710X (2000) (no. 18) 7 tables; 33 ref.

IMPERATA; GRASSLAND; FARMING SYSTEMS; SUSTAINABILITY; ALLEY CROPPING; SOIL CONSERVATION; INDONESIA.

0642 SALLATA, M.K. [Development concept of Cani Sirenreng tourism park, Bone district, South Sulawesi (Indonesia)]. Konsepsi pengembangan taman wisata alam Cani Sirenreng, Kabupaten Bone, Sulawesi Selatan/

Sallata, M.K.. Eboni (Indonesia) ISSN 0853-9197 (1999) (no. 4) p. 1-11 12 ref.

SULAWESI; TOURISM; PROTECTIVE FOREST; LANDSCAPE.

0643 SUDARYANTO, T. [Perspective of agricultural development policy in post economic crises]. Perspektif kebijaksanaan pembangunan pertanian pasca krisis ekonomi/Sudaryanto, T.; Rusastra, I W.; Jamal, E. [Analysis and Perspective of Agricultural Development Policy in Post Economic Crises]. Analisis dan Perspektif Kebijaksanaan Pembangunan Pertanian Pasca Krisis Ekonomi /Sudaryanto, T.; Rusastra, I W.; Jamal, E. (Eds.) Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (no. 20) p. v-xxiii 18 ref.

INDONESIA; ECONOMIC CRISES; AGRICULTURAL DEVELOPMENT; DEVELOPMENT POLICIES.

0644 SULAIMAN, F. The impacts of agricultural development project on women: a case study of the Eastern Islands Smallholder Farming Systems and Livestock Development Project (EISFSLDP)/Sulaiman, F. (Pusat Penelitian Sosial Ekonomi, Bogor (Indonesia)). Jurnal Agro Ekonomi (Indonesia) ISSN 0216-9053 (1998) v. 17(2) p. 59-79 20 tables; 7 ref. Summaries (En, In)

LIVESTOCK; ROLE OF WOMEN; AGRICULTURAL DEVELOPMENT; SMALL FARMS; FARMING SYSTEMS; SOCIO-ECONOMIC DEVELOPMENT.

0645 SUMARNO. Collaboration between natural and social scientists on farming systems research/Sumarno; Taslim, H. Leaning from the Farming Systems Research Experiences in Indonesia: Proceedings of CASER-JIRCAS International Workshop/Goto, J.; Mayrowani, H. (Eds.). Tsukuba, Ibaraki (Japan): JIRCAS, 2000 p. 47-52. JIRCAS Working Report (Japan) ISSN 1341-710X (2000) (no. 18) 6 ref.

CROPS; FARMING SYSTEMS; RESEARCH; SCIENTISTS.

0646 SUNARSEDYONO. [Implementation on Development Model of rice-based farming system on rainy season of 1998/1999 in Malang regency]. Pelaksanaan model pengembangan sistem usaha pertanian (SUP) padi musim hujan 1998/1999 di Kabupaten Malang/Sunarsedyono; Istuti, W.; Saeri, M.; Ismail, C.; Supeno, A.; Hariyanto; Suwono (Balai Pengkajian Teknologi Pertanian Karangploso, Malang (Indonesia)). Malang (Indonesia): BPTP Karangploso, 1999 32 p. 2 ill.; 10 tables; 8 ref. Summary (En)

JAVA; ORYZA SATIVA; FARMING SYSTEMS; WET SEASON; APPROPRIATE TECHNOLOGY; TRAINING; TECHNOLOGY TRANSFER; PRODUCTION POSSIBILITIES; CROP PERFORMANCE; COST BENEFIT ANALYSIS.

0647 SURACHMAN. Research and extension linkages in farming systems- a field experience/Surachman; Prajogo, K.B.. Learning from the Farming Systems Research Experiences in Indonesia: Proceedings of CASER-JIRCAS International Workshop/Goto, J.; Mayrowani, H. (Eds.). Tsukuba, Ibaraki (Japan): JIRCAS, 2000 p. 101-106. JIRCAS Working Report (Japan) ISSN 1341-710X (2000) (no. 18) 3 ill., 4 ref.

INDONESIA; FARMING SYSTEMS; RESEARCH; EXTENSION ACTIVITIES; ADVISORY OFFICERS; TECHNOLOGY.

0648 TJITROPRANOTO, P. [Agricultural science and technology for supporting agricultural development]. Pengembangan IPTEK pertanian untuk mendukung pembangunan pertanian andalan/Tjitropranoto, P.. [Research Result Report of Workshop on Reposition of Agricultural Sector to National Economic]. Laporan Hasil Kegiatan Lokakarya Reposisi Sektor Pertanian Menjadi Andalan Ekonomi Nasional/Pusat Penelitian Sosial Ekonomi Pertanian Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (pt. 6 ) 20 p.

INDONESIA; AGRICULTURAL DEVELOPMENT; PRODUCTION INCREASE; INTENSIVE FARMING; INDIGENOUS KNOWLEDGE.

0649 WIDODO, S. [Assessment on technology of soybean farming system on flooded land in Bantul resident, Province of Daerah Istimewa Yogyakarta (Indonesia)]. Pengkajian teknologi usaha tani kedelai pada lahan sawah di Kabupaten Bantul, Propinsi Daerah Istimewa Yogyakarta/Widodo, S.; Aliudin (Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia)). [Proceedings of Scientific Seminar and Workshop of Technology on Specific Location for Agricultural Developing with Agrobusiness Orientation]. Prosiding Seminar Ilmiah dan Lokakarya Teknologi Spesifik Lokasi Dalam Pengembangan Pertanian dengan Orientasi Agribisnis/Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). Yogyakarta (Indonesia): IPPTP, 1998 p. 88-97 4 tables, 9 ref. Summary (In)

GLYCINE MAX; FARMING SYSTEMS; CROP YIELD; FARM MANAGEMENT; APPROPRIATE TECHNOLOGY; FLOODED LAND.

0650 YOKOYAMA, S. Rural transformation under rapid economic growth: two case studies in West Java/Yokoyama, S.; Sudana, W.; Bagyo, A.S.; Zakaria, K.. Learning from the Farming Systems Research Experiences in Indonesia: Proceedings of CASER-JIRCAS International Workshop/Goto, J.; Mayrowani, H. (Eds.). Tsukuba, Ibaraki (Japan): JIRCAS, 2000 p. 73-86. JIRCAS Working Report (Japan) ISSN 1341-710X (2000) (no. 18) 4 ill., 10 tables; 6 ref.

JAVA; RURAL AREAS; ECONOMIC GROWTH; FARMING SYSTEMS; MECHANIZATION; EMPLOYMENT; FARM INCOME; AGRICULTURAL STRUCTURE.

## E21 AGROINDUSTRY / AGROINDUSTRI

0651 ALVIANUS, R. [Feasibility study of silkworm industry: case study on silkworm industry farmers in Margowangsan, Sawangan, Magelang (Central Java, Indonesia)]. Analisis kelayakan pengembangan industri ulat sutera: Studi kasus di kelompok tani sutera alam Margowangsan, Sawangan, Kabupaten Magelang/Alvianus, R.; Widodo, K.H.; Purwadi, D.. Agritech (Indonesia) ISSN 0216-

0455 (1998) v. 19(2) p. 66-73 11 tables; 23 ref. Summary (En)

SILKWORMS; FEASIBILITY STUDIES; MARKETING TECHNIQUES; JAVA.

0652 GUNAWAN, M. [Development strategy of area based agribusiness and high yielding commodities]. Strategi pengembangan agribisnis berbasis wilayah dan komoditas unggul/ Gunawan, M. [Research Result Report of Workshop on Reposition of Agricultural Sector to National Economic]. Laporan Hasil Kegiatan Lokakarya Reposisi Sektor Pertanian Menjadi Andalan Ekonomi National/Pusat Penelitian Sosial Ekonomi Pertanian Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (pt. 2 ) 13 p. 2 tables

INDONESIA; AGROINDUSTRIAL SECTOR; DEVELOPMENT POLICIES; AGRICULTURAL PRODUCTS; MEDITERRANEAN SEA.

0653 NIKIJULUW, V. [Analysis of development policy on fish flour industry in Indonesia]. Analisis kebijaksanaan pengembangan industri tepung ikan di Indonesia/Nikijuluw, V.; Wahyuning, K.S.; Zulham, A.; Nurasa, T.. [Analysis and Perspective of Agricultural Development Policy in Post Economic Crises]. Analisis dan Perspektif Kebijaksanaan Pembangunan Pertanian Pasca Krisis Ekonomi /Sudaryanto, T.; Rusasta, I W.; Jamal, E. (Eds.) Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (no. 20) p. v-xxiii 10 ill., 30 ref.

FISH; FLOURS; FEED INDUSTRY; DOMESTIC MARKETS; PRICES; DEVELOPMENT POLICIES; INDONESIA.

0654 RACHMAT, M. [Perspective of cassava development in Lampung (Indonesia)]. Perspektif pengembangan ubi kayu di Propinsi Lampung/Rachmat, M.; Supadi; Sumedi. [Analysis and Perspective of Agricultural Development Policy in Post Economic Crises]. Analisis dan Perspektif Kebijaksanaan Pembangunan Pertanian Pasca Krisis Ekonomi /Sudaryanto, T.; Rusasta, I W.; Jamal, E. (Eds.) Pusat Penelitian Sosial Ekonomi Pertanian,

Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (no. 20) p. v-xxiii 11 tables

CASSAVA; PRODUCTIVITY; INTERNATIONAL TRADE; EXPORTS; PRICES; DEVELOPMENT POLICIES; SUMATRA.

0655 SAPTANA. [Situation and poultry industry in Indonesia]. Situasi dan prospek industri perunggasan di Indonesia/Saptana; Basuno, E.; Erwidodo. [Analysis and Perspective of Agricultural Development Policy in Post Economic Crises]. Analisis dan Perspektif Kebijaksanaan Pembangunan Pertanian Pasca Krisis Ekonomi/Sudaryanto, T.; Rusastra, I W.; Jamal, E. (Eds.) Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (no. 20) p. v-xxiii 9 tables; 24 ref.

POULTRY; FEED INDUSTRY; CONSUMPTION; AGRICULTURAL SITUATION; ECONOMIC CRISES; DEVELOPMENT POLICIES; INDONESIA.

0656 SARAGIH, B. [Prospect of plantations agribusiness as a solution of economic crises and forward development strategy]. Prospek agribisnis perkebunan sebagai jalan keluar krisis ekonomi dan strategi pengembangan ke depan/ Saragih, B. (Institut Pertanian Bogor (Indonesia)). [Proceedings of Workshop on Agricultural Partnership and Expose of Current Technology Resulted from Estate Research]. Kumpulan makalah: Lokakarya Kemitraan Pertanian dan Ekspos Teknologi Mutakhir Hasil Penelitian Perkebunan/Balai Pengkajian Teknologi Pertanian, Ungaran (Indonesia). Ungaran (Indonesia): BPTP, 1998 (pt. 1) 10 p. 2 tables

INDUSTRIAL CROPS; AGROINDUSTRIAL SECTOR; ECONOMIC CRISES; DEVELOPMENT POLICIES.

0657 SIMATUPANG, P. [Sugar industry and its effect on rice self sufficiency]. Reformasi industri gula dan dampaknya terhadap pemantapan swasembada beras/Simatupang, P.; Soentoro; Erwidodo. [Analysis and Perspective of Agricultural Development Policy in Post Economic Crises]. Analisis dan Perspektif

Kebijaksanaan Pembangunan Pertanian Pasca Krisis Ekonomi /Sudaryanto, T.; Rusastra, I W.; Jamal, E. (Eds.) Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (no. 20) p. v-xxiii 4 tables

CANE SUGAR; SUGAR INDUSTRY; RICE; SELF SUFFICIENCY; ECONOMIC SITUATION; PRICE POLICIES.

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COCOA BEANS; COCOA INDUSTRY; TRADE AGREEMENTS; FARM AREA; PRODUCTION; PRICES; URUGUAY; WORLD; INDONESIA.

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MANGOSTEEN; EFFICIENCY; COST ANALYSIS; MARKETING CHANNELS; JAVA; SUMATRA.

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RICE; IMPORTS; TARIFFS; DEVELOPMENT POLICIES; PRICES.

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CITRUS; FARMING SYSTEMS; MARKETING CHANNELS; MARKETING MARGINS; ECONOMIC ANALYSIS

## E73 CONSUMEN ECONOMICS / EKONOMI KONSUMEN

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LYCOPERSICON ESCULENTUM; VARIETIES; CULTIVATION; TECHNOLOGY TRANSFER; FERTILIZER APPLICATION; PRUNING.

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FLOODED RICE; GROWTH; YIELD COMPONENTS; DIRECT SOWING;

TRANSPLANTING; NITROGEN FERTILIZERS; ZERO TILLAGE; PUDDLING; FERTILIZER APPLICATION.

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HEVEA BRASILIENSIS; TAPPING; PRODUCTIVITY.

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## F02 PLANT PROPAGATION / PERBANYAKAN TANAMAN

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GRAFTING; PRODUCTIVITY;  
ORGANOLEPTIC PROPERTIES.

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CROPS; FARMYARD MANURE; SOIL MICROORGANISMS; DOSAGE EFFECTS; ACTINOMYCETALES; APPLICATION RATES.

## F06 IRRIGATION / IRIGASI

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DURIO ZIBETHINUS; IRRIGATION METHODS; EQUIPMENT; BAMBOOS; PLANT PHYSIOLOGY.

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CAPSICUM ANNUUM; IRRIGATION SYSTEMS; CULTIVATION.

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CAPSICUM ANNUUM; SPACING; SPRINKLER IRRIGATION; TRICKLE IRRIGATION; YIELDS; LAND USE; SANDY SOILS; BEACHES; JAVA.

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SACCHARUM OFFICINARUM; HYDRO-DYNAMICS; IRRIGATION SYSTEMS.

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0723 TRIWIBOWO, R.I. [Design of drip irrigation system for horticulture in multicrop land]. Perancangan irigasi sistem tetes/drip untuk lahan multicrop tanaman hortikultura/Triwibowo, R.I. (Balai Pengembangan TTG-P3FT-LIPI, Subang (Indonesia)). [Proceedings of the National Seminar and Seventh Congress (PERTETA) of Agricultural Technique Associations]. Prosiding Seminar Nasional dan Kongres 7 Perhimpunan Teknik Pertanian (PERTETA). V. 4/Susanto, S.; Rahardjo, B.; Purwadi, T. (Eds.) . Yogyakarta: UGM, 1999 p. 85-96 5 ill., 4 tables; 7 ref. Summary (In)

HORTICULTURE; TRICKLE IRRIGATION; FARMING SYSTEMS; CULTIVATION.

0724 WARDANA, W. The application of tri hita karana in design, construction, operation and maintenance of Subak irrigation scheme. Penerapan tri hita karana dalam perancangan, pembangunan serta operasi dan pemeliharaan jaringan irigasi subak/Wardana, W. (Universitas Gadjah Mada, Yogyakarta (Indonesia). Fakultas Teknologi Pertanian); Sudira, P. Agritech (Indonesia) ISSN 0216-0455 (1998) v. 19(2) p. 59-65 1 ill., 2 tables; 10 ref. Summary (En)

BALI; IRRIGATION SCHEMES; DESIGN; MAINTENANCE.

## **F08 CROPPING PATTERNS AND SYSTEMS / POLA TANAM DAN SISTEM PENANAMAN**

0725 HARIS, B.A. [Ecosystem characteristic of upland rice and rubber plants intercropping]. Karakteristik ekosistem tanaman sela padi gogo dengan tanaman karet/Haris, B.A.; Chozin, M.A.; Sopandie, D. (Institut Pertanian Bogor (Indonesia). Fakultas Pertanian). [Proceedings of the Seminar on Increasing National Rice Production Through Tabela (Direct Sowing) System of Lowland Rice and Utilization of

Unproductive Land]. Prosiding Seminar Peningkatan Produksi Padi Nasional Melalui Sistem Tabela Padi Sawah dan Pemanfaatan Lahan Kurang Produktif/Sriyani, N.; Widodo, S.E.; Kamal, M.; Karyanto, A.; Setiawan, K.; Sembodo, D.R.J.; Pramono, E.; Hadi, M.S. (Eds.) Himpunan Ilmu Gulma Indonesia Komda Lampung; Perhimpunan Agronomi Indonesia Komisariat Lampung; Universitas Lampung, Bandar Lampung (Indonesia). Bandar Lampung (Indonesia): HIGI; Peragi, 1999 p. 449-454 1 ill., 3 tables; 13 ref. Summary (En)

UPLAND RICE; HEVEA BRASILIENSIS; INTERCROPPING; CATCH CROPPING; ECOSYSTEMS; LIGHT REQUIREMENTS; SHADE; MICROCLIMATE; VARIETY TRIALS; YIELD COMPONENTS; GROWTH.

0726 INSTALASI PENELITIAN DAN PENGKAJIAN TEKNOLOGI PERTANIAN, YOGYAKARTA. [Red pepper varieties and intercropping of shallot-red pepper]. Varietas cabe merah dan tumpangsari bawang merah-cabe merah/Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). [Agricultural Technology Recommendation for Yogyakarta Province (Indonesia)]. Rekomendasi Teknologi Pertanian Propinsi Daerah Istimewa Yogyakarta/Musofie, A.; Wardhani, N.K.; Mudjisihono, R.; Aliudin (Eds.). Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). Yogyakarta (Indonesia): IPPTP, 1999 p. 29-32 2 ref. Appendices

CAPSICUM ANNUUM; ALLIUM ASCALONICUM; INTERCROPPING; VARIETIES; TECHNOLOGY TRANSFER.

0727 MAWARDI, M. An adaptive and productive farming method in a markedly different water condition/Mawardi, M. (Universitas Gadjah Mada, Yogyakarta (Indonesia)). Indonesian Journal of Tropical Agriculture (Indonesia) ISSN 0852-5927 (1997) v. 8(3) p. 64-70 3 ill., 3 tables; 8 ref. Summary (En)

CROPS; CROPPING SYSTEMS; CROP MANAGEMENT; WATER USE; IRRIGATION SYSTEMS; LAND PRODUCTIVITY.

0728 MENZ, K.M. Economic alternatives to shifting cultivation in imperata areas of Southeast AsiaMenz, K.M.; Magcale-Macandog, D.; Rusastra, I.W. (Pusat Penelitian Sosial Ekonomi Pertanian, Bogor (Indonesia). Bogor (Indonesia): PSE, 1997 204 p. 4 ill., 16 tables; 20 ref. Appendices

IMPERATA CYLINDRICA; ECONOMICS; SHIFTING CULTIVATION; LIVESTOCK; EROSION; RUBBER; SOUTH EAST ASIA.

0729 PRAWOTO, A. [Diversification of cacao plant with *Maranta arundinacea*]. Diversifikasi tanaman kakao dengan garut (*Maranta arundinacea* L.)/Prawoto, A. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Ekspos Teknologi Perkebunan: Buku 2: Peningkatan Produktivitas dan Efisiensi Industri Perkebunan/Dradjat, B.; Supriadi, M.; Gunawan, A.; Fadjar, U.; Nancy, C. (Eds.) Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia). Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 175-180 4 tables; 18 ref.

THEOBROMA CACAO; MARANTA ARUNDINACEA; DIVERSIFICATION; YIELDS.

0730 WIBAWA, G. [Improvement of land productivity with intercropping technology]. Peningkatan produktivitas lahan dengan teknologi intercroping/Wibawa, G.; Rosjid, M.J.. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Ekspos Teknologi Perkebunan: Buku 2: Peningkatan Produktivitas dan Efisiensi Industri Perkebunan/Dradjat, B.; Supriadi, M.; Gunawan, A.; Fadjar, U.; Nancy, C. (Eds.) Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia). Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 55-62 4 tables; 23 ref. Appendices

HEVEA BRASILIENSIS; INTERCROPPING; COST BENEFIT ANALYSIS; LAND PRODUCTIVITY.

0731 WIDODO, S.E. [The uses of intercrop spaces of fruit crops for upland rice plant]. Pemanfaatan ruang antar tanaman buah-buahan untuk tanaman padi gogo/Widodo, S.E. (Universitas Lampung, Bandar Lampung (Indonesia). Fakultas Pertanian). [Proceedings of the Seminar on Increasing National Rice Production Through Tabela (Direct Sowing) System of Lowland Rice and Utilization of Unproductive Land]. Prosiding Seminar Peningkatan Produksi Padi Nasional Melalui Sistem Tabela Padi Sawah dan Pemanfaatan Lahan Kurang Produktif/Sriyani, N.; Widodo, S.E.; Kamal, M.; Karyanto, A.; Setiawan, K.; Sembodo, D.R.J.; Pramono, E.; Hadi, M.S. (Eds.) Himpunan Ilmu Gulma Indonesia Komda Lampung; Perhimpunan Agronomi Indonesia Komisariat Lampung; Universitas Lampung, Bandar Lampung (Indonesia). Bandar Lampung (Indonesia): HIGI; Peragi, 1999 p. 444-448 29 ref. Summary (En)

UPLAND RICE; INTERCROPPING; FRUIT CROPS; SHADING; LAND USE; INTRODUCED VARIETIES.

0732 WINARDI. [Upland rice planting under young rubber: some cases in Sitiung, West Sumatra (Indonesia)]. Tanaman padi gogo di bawah karet muda (beberapa kasus di sekitar Sitiung, Sumatera Barat)/Winardi (Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Sitiung, Kota Baru (Indonesia)). [Proceedings of the Seminar on Increasing National Rice Production Through Tabela (Direct Sowing) System of Lowland Rice and Utilization of Unproductive Land]. Prosiding Seminar Peningkatan Produksi Padi Nasional Melalui Sistem Tabela Padi Sawah dan Pemanfaatan Lahan Kurang Produktif/Sriyani, N.; Widodo, S.E.; Kamal, M.; Karyanto, A.; Setiawan, K.; Sembodo, D.R.J.; Pramono, E.; Hadi, M.S. (Eds.) Himpunan Ilmu Gulma Indonesia Komda Lampung; Perhimpunan Agronomi Indonesia Komisariat Lampung; Universitas Lampung, Bandar Lampung (Indonesia). Bandar Lampung (Indonesia): HIGI; Peragi, 1999 p. 439-443 2 tables; 7 ref. Summary (En)

UPLAND RICE; INTERCROPPING; CATCH CROPPING; UNDERPLANTING; HEVEA BRASILIENSIS; SOIL FERTILITY; SOCIOECONOMIC ENVIRONMENT; INDIGENOUS KNOWLEDGE; SUMATRA.

### F30 PLANT GENETICS AND BREEDING / GENETIKA DAN PEMULIAAN TANAMAN

0733 AMIR, M. [Study of pathotype structure dynamic of *Pyricularia grisea* and partial resistance use for blast disease control on upland rice]. Studi dinamika struktur patotipe *Pyricularia grisea* dan pemanfaatan ketahanan parsial untuk pengendalian penyakit blas pada padi gogo/Amir, M.; Anggiani; Santoso. [Proceedings of the Rice Research Results During 1998/1999: Book 2]. Kumpulan Makalah Hasil Penelitian 1998/1999: Buku 2/Balai Penelitian Tanaman Padi, Sukamandi (Indonesia). Sukamandi (Indonesia): BALITPA, 1999 (pt. 5) 24 p. 7 tables; 12 ref. Summary (In)

UPLAND RICE; PYRICULARIA; DISEASE CONTROL; DISEASE RESISTANCE; VARIETY TRIALS; PATHOGENICITY.

0734 ANWARI, M. Line development of segregation population on mungbean for resistance to leaf diseases. Perbaikan daya hasil dan ketahanan terhadap penyakit daun pada kacang hijau. 2. Pembentukan populasi bersegregasi untuk ketahanan terhadap penyakit daun pada kacang hijau/Anwari, M.; Soehendi, R.. [Research Results of Legumes and Root Crops During 1996/1997 Periodes]. Hasil Penelitian Tanaman Kacang-kacangan dan Umbi-umbian Tahun Anggaran 1996/1997/Balai Penelitian Tanaman Kacang-kacangan dan Umbi-umbian, Malang (Indonesia). Malang (Indonesia): BALITKABI, 1997 p. 25-31 2 tables; 7 ref. Summaries (En, In)

VIGNA RADIATA; CERCOSPORA; DISEASE RESISTANCE; HYBRIDIZATION; GENETIC VARIATION; SEGREGATION; YIELDS.

0735 HULUPI, R. [Clone composition of robusta coffee that appropriate for humid climate]. Komposisi klon kopi robusta yang sesuai untuk kondisi iklim basah/Hulupi, R.; Mawardi, S.. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Ekspose Teknologi Perkebunan: Buku 2: Peningkatan Produktivitas dan Efisiensi Industri Perkebunan/Dradjat, B.; Supriadi, M.; Gunawan,

A.; Fadjar, U.; Nancy, C. (Eds.). Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia). Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 169-174 2 ill., 1 table; 5 ref. Appendices

ROBUSTA COFFEE; CLONES; HUMID CLIMATE; CROP PERFORMANCE.

0736 JAMARAN, I. [Biotechnology development for supporting national agroindustry]. Pengembangan bioteknologi untuk mendorong agroindustri nasional/Jamaran, I. [Proceedings of the Seminar on Annual Scientific Meeting of Indonesian Society for Microbiology: "Role of Microbiology on Agroindustry Supporting National Food Security"]. Prosiding Seminar Pertemuan Ilmiah Tahunan Perhimpunan Mikrobiologi Indonesia: "Peranan Mikrobiologi Dalam Agroindustri Untuk Menunjang Ketahanan Pangan Nasional"/Hardoyo; Sutikno; Utomo, S.D.; Ginting, C.; Gafur, A. (Eds.). Bandar Lampung (Indonesia): PERMI Cabang Lampung, 1999 p. 1-9 7 ref.

INDONESIA; BIOTECHNOLOGY; AGRO-INDUSTRIAL SECTOR; TRANSGENIC PLANTS; BIOFERTILIZERS; BIOPESTICIDES; PLANT GROWTH SUBSTANCES.

0737 KARSINAH. Double-layer culture technique for in vitro selection of banana resistant to *Fusarium oxysporum* f.sp. *cubense*. Teknik kultur Double-layer untuk seleksi in-vitro pisang tahan *Fusarium oxysporum* f.sp. *cubense*/Karsinah; Sunyoto; Jumjunidang; Nurhadi (Balai Penelitian Tanaman Buah, Solok (Indonesia)). Jurnal Hortikultura (Indonesia) ISSN 0853-7097 (1999) v. 9(2) p. 93-98 2 ill., 2 tables; 20 ref. Summaries (En, In)

MUSA; FUSARIUM OXYSPORUM; IN VITRO SELECTION; VITROPLANTS.

0738 LUBIS, E. Identification of genetic resistance to blast disease of some upland varieties used as blast parents. Identifikasi gen ketahanan pada beberapa varietas padi gogo calon tetua untuk blas/Lubis, E.; Suwarno; Poerbojo, I.B.; Tjubaryat, T.; Allidawati Bs.; Murdani D.; Masdiar B.; Purnawati, E.. [Proceedings of the Rice Research Results During 1998/1999: Book 2]. Kumpulan

Makalah Hasil Penelitian 1998/1999: Buku 2/Balai Penelitian Tanaman Padi, Sukamandi (Indonesia). Sukamandi (Indonesia): BALITPA, 1999 (pt. 6) 16 p. 4 tables; 13 ref. Summaries (En, In). Appendices

UPLAND RICE; VARIETIES; GENETIC RESISTANCE; PYRICULARIA ORYZAE; SELECTION.

0739 POERBA, Y.S. [Phenotypes performance and correlation of vegetative characteristics of *Curcuma spp.*]. Penampilan fenotipik dan korelasi sifat-sifat vegetatif *Curcuma spp.*/Poerba, Y.S. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 127-131 3 tables; 6 ref.

CURCUMA; PHENOTYPES; AGRONOMIC CHARACTERISTICS.

0740 POERBOJO, I.B. [Improvement of upland rice varieties tolerance to shading: yield test in some lighting environment]. Perbaikan varietas padi gogo toleran naungan uji daya hasil di beberapa lingkungan pencahayaan/Poerbojo, I.B.; Tjubaryat, T.; Karmita. [Proceedings of the Rice Research Results During 1998/1999: Book 2]. Kumpulan Makalah Hasil Penelitian 1998/1999: Buku 2/Balai Penelitian Tanaman Padi, Sukamandi (Indonesia). Sukamandi (Indonesia): BALITPA, 1999 (pt.3) 11 p. 4 tables; 4 ref. Summary (In)

UPLAND RICE; VARIETIES; VARIETY TRIALS; RESISTANCE TO INJURIOUS FACTORS; SHADING; LIGHTING; YIELDS.

0741 PUSAT PENELITIAN DAN PENGEMBANGAN HORTIKULTURA. [Rosa cultivar Balithi C.91012-5]. Kultivar mawar Balithi C.91012-5/Pusat Penelitian dan Pengembangan Hortikultura, Jakarta (Indonesia) Warta Penelitian dan Pengembangan Pertanian (Indonesia) ISSN 0126-4427 (2000) v. 22(2) p. 1 1 table

ROSA; VARIETIES; CLONES.

0742 PUSAT PENELITIAN DAN PENGEMBANGAN HORTIKULTURA. [Superior clone of *Dendranthema morifolium* spray and standard types]. Klon unggul krisan tipe spray dan standar/Pusat Penelitian dan Pengembangan Tanaman Hortikultura, Jakarta (Indonesia). Warta Penelitian dan Pengembangan Pertanian (Indonesia) ISSN 0126-4427 (2000) v. 22(2) p. 2-3 2 ill.

DENDRANTHEMA MORIFOLIUM; CLONES; FLOWERS; PHENOTYPES.

0743 PUSAT PENELITIAN DAN PENGEMBANGAN TANAMAN PANGAN. [Performance of hybrid maize]. Penampilan jagung hibrida silang tunggal umur dalam/Pusat Penelitian dan Pengembangan Tanaman Pangan, Bogor (Indonesia). Warta Penelitian dan Pengembangan Pertanian (Indonesia) ISSN 0126-4427 (2000) v. 22(2) p. 8-9 1 ill., 1 table

ZEA MAYS; HYBRIDS; VARIETIES; EVALUATION.

0744 REBIN. Hybridization and characterization of F1 hybrid mango seedling obtained from inter-varieties polycrossing. Hibridisasi dan karakterisasi semai hibrid F1 hasil persilangan antar varietas mangga/Rebin; Purnomo, S. (Balai Penelitian Tanaman Buah, Solok (Indonesia); Effendy, A.R.; Sunarwati, D. Jurnal Hortikultura (Indonesia) ISSN 0853-7097 (1999) v. 9(2) p. 99-107 1 ill., 6 tables; 18 ref. Summaries (En, In)

MANGIFERA INDICA; HYBRIDIZATION; XYLEM; F1 HYBRIDS; SEEDLINGS; GROWTH.

0745 SIMANULLANG, Z.A. [Improvement of upland rice high-yielding varieties tolerance to blast disease]. Perbaikan ketahanan varietas unggul padi gogo terhadap penyakit blast: pengujian genotip tahan blast dengan mutu beras baik di beberapa lingkungan tumbuh/Simanullang, Z.A.; Poerbojo, I.B.; Tjubaryat, T.; Sukarno. [Proceedings of the Rice Research Results During 1998/1999: Book 2]. Kumpulan

Makalah Hasil Penelitian 1998/1999: Buku 2/Balai Penelitian Tanaman Padi, Sukamandi (Indonesia). Sukamandi (Indonesia): BALITPA, 1999 (pt. 2) 4 p. 4 ref. Summary (In)

UPLAND RICE; HIGH YIELDING VARIETIES; GENOTYPES; DISEASE RESISTANCE; BLIGHTS; QUALITY; ENVIRONMENT.

0746 SOEDARSONO, J. [Biotechnology application on environmental insight agribusiness]. Penerapan bioteknologi dalam agrobisnis berwawasan lingkungan/Soedarsono, J. (Universitas Gadjah Mada, Yogyakarta (Indonesia). Fakultas Pertanian). [Proceeding of Technical Meeting of Plantation Biotechnology for Practice: Empowerment of Biotechnology on Plantation Agroindustry]. Prosiding Pertemuan Teknis Bioteknologi Perkebunan Untuk Praktek: Pemberdayaan Bioteknologi Dalam Agro-industri Perkebunan/Nurhaimi-Haris; Siswanto; Panji, T.; Away, Y. (Eds.). Unit Penelitian Bioteknologi Perkebunan, Bogor (Indonesia). Bogor (Indonesia): Unit Penelitian Bioteknologi Perkebunan, 2000 p. 74-81 20 ref.

AGROINDUSTRIAL SECTOR; BIOTECHNOLOGY; TECHNOLOGY TRANSFER; ENVIRONMENTAL IMPACT ASSESSMENT.

0747 SUGIARTA, E. [PSBM 90-44: prospective high yielding varieties of sugar cane in dry humid climate]. PSBM 90-44: varietas tebu unggul harapan rendemen tinggi di lahan kering beriklim basah/Sugiarta, E.; Mirzawan, PDN.; Subandi; Sudaryanto, A.. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Ekspos Teknologi Perkebunan: Buku 2: Peningkatan Produktivitas dan Efisiensi Industri Perkebunan/Dradjat, B.; Supriadi, M.; Gunawan, A.; Fadjar, U.; Nancy, C. (Eds.) Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia). Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 162-166 2 tables; 6 ref. Appendix

SACCHARUM OFFICINARUM; HIGH YIELDING VARIETIES; DRY FARMING; HUMID CLIMATE; PRODUCTIVITY.

0748 SUGIHARTO, A.N. Karyological variation in shallot (*Allium cepa* var. *ascalonicum*) and wakegi onions (A. x wakegi Araki) collected in Indonesia/Sugiharto, A.N. (Universitas Brawijaya, Malang (Indonesia). Fakultas Pertanian); Okuba, H. Agrivita (Indonesia) ISSN 0126-0537 (1999/2000) v. 21(2) p. 5-11 6 ill., 1 table; 19 ref. Summary (En)

ALLIUM CEPA; KARYOTYPES; CHROMOSOME NUMBER; VARIETIES; PLANT COLLECTIONS; INDONESIA.

0749 SUHARDI. [Shade tolerance evaluation of upland rice lines/varieties]. Evaluasi toleransi galur/varietas padi gogo terhadap naungan/ Suhardi; Sulistyono, E.; Soepandi, D.; Chozin, M.A.; Sastrosumardjo, S. (Institut Pertanian Bogor (Indonesia). Fakultas Pertanian); Suwarno. [Proceedings of the Seminar on Increasing National Rice Production Through Tabela (Direct Sowing) System of Lowland Rice and Utilization of Unproductive Land]. Prosiding Seminar Peningkatan Produksi Padi Nasional Melalui Sistem Tabela Padi Sawah dan Pemanfaatan Lahan Kurang Produktif/Sriyani, N.; Widodo, S.E.; Kamal, M.; Karyanto, A.; Setiawan, K.; Sembodo, D.R.J.; Pramono, E.; Hadi, M.S. (Eds.) Himpunan Ilmu Gulma Indonesia Komda Lampung; Perhimpunan Agronomi Indonesia Komisariat Lampung; Universitas Lampung, Bandar Lampung (Indonesia). Bandar Lampung (Indonesia): HIGI; Peragi, 1999 p. 481-487 2 ill., 4 tables; 9 ref. Summary (En)

UPLAND RICE; VARIETIES; LIGHT REQUIREMENTS; SHADE; INTER-CROPPING; CROP PERFORMANCE; GROWTH RATE; SELECTION.

0750 TJUBARYAT, T. [Improvement of Cirata varieties of upland rice tolerance to acidity and Al toxicity]. Perbaikan toleransi padi gogo Cirata terhadap kemasaman dan keracunan Al: uji daya hasil tetua dan turunan Cirata di tiga variasi lingkungan tumbuh masam/Tjubaryat, T.; Poerbojo, I.B.; Atito D.; Sujanang, U. [Proceedings of the Rice Research Results During 1998/1999: Book 2]. Kumpulan Makalah Hasil Penelitian 1998/1999: Buku 2/ Balai Penelitian Tanaman Padi, Sukamandi (Indonesia). Sukamandi (Indonesia): BALITPA, 1999 (pt. 1) 9 p. 6 tables; 3 ref. Summary (In)

UPLAND RICE; VARIETIES; VARIETY TRIALS; RESISTANCE TO INJURIOUS FACTORS; ACIDITY; ALUMINIUM; TOXICITY; YIELDS.

0751 UTOMO, S.D. [Genetic engineering status of rice plant]. Pemuliaan non-konvensional untuk mendapatkan varietas unggul: status rekayasa genetika tanaman padi/ Utomo, S.D. (Universitas Lampung, Bandar Lampung (Indonesia). Fakultas Pertanian). [Proceedings of the Seminar on Increasing National Rice Production Through Tabela (Direct Sowing) System of Lowland Rice and Utilization of Unproductive Land]. Prosiding Seminar Peningkatan Produksi Padi Nasional Melalui Sistem Tabela Padi Sawah dan Pemanfaatan Lahan Kurang Produktif/Sriyani, N.; Widodo, S.E.; Kamal, M.; Karyanto, A.; Setiawan, K.; Sembodo, D.R.J.; Pramono, E.; Hadi, M.S. (Eds.) Himpunan Ilmu Gulma Indonesia Komda Lampung; Perhimpunan Agronomi Indonesia Komisariat Lampung; Universitas Lampung, Bandar Lampung (Indonesia). Bandar Lampung (Indonesia): HIGI; Peragi, 1999 p. 300-304 1 table; 28 ref. Summary (En)

ORYZA SATIVA; GENETIC TRANSFORMATION; BREEDING METHODS; HIGH YIELDING VARIETIES; GENETIC ENGINEERING; PEST RESISTANCE; SCIRPOPHAGA INCERTULAS; CNAPHALOCROCIS MEDINALIS; STEM EATING INSECTS.

#### F40 PLANT ECOLOGY / EKOLOGI TANAMAN

0752 HAYANI. [Effect of drought stress on the development of direct seeding technology in Gedong Tataan and Gading Rejo, Lampung (Indonesia)]. Dampak kekeringan terhadap perkembangan teknologi "Tabela" di daerah Gedong Tataan dan Gading Rejo, Lampung/Hayani; Purwadi, D. (Loka Pengkajian Teknologi Pertanian Natar, Lampung (Indonesia)). [Proceedings of the seminar on increasing national rice production through tabela (direct sowing) system of lowland rice and utilization of unproductive land]. Prosiding seminar peningkatan produksi padi nasional melalui sistem tabela padi sawah dan pemanfaatan lahan kurang produktif/Sriyani, N.;

Widodo, S.E.; Kamal, M.; Karyanto, A.; Setiawan, K.; Sembodo, D.R.J.; Pramono, E.; Hadi, M.S. (Eds.) Himpunan Ilmu Gulma Indonesia Komda Lampung; Perhimpunan Agronomi Indonesia Komisariat Lampung; Universitas Lampung, Bandar Lampung (Indonesia). Bandar Lampung (Indonesia): HIGI; Peragi, 1999 p. 81-86 2 tables; 7 ref. Summary (En)

ORYZA SATIVA; DIRECT SOWING; DROUGHT STRESS; IRRIGATION SYSTEMS; TECHNOLOGY TRANSFER; INTEREST GROUPS; EXTENSION ACTIVITIES.

#### F60 PLANT PHYSIOLOGY AND BIO-CHEMISTRY / FISIOLOGI DAN BIOKIMIA TANAMAN

0753 AGUSTA, A. [Essential oil composition of *Cinnamomum kinabaluensis* and *C. subavenium* (Lauraceae) leaves]. Komposisi minyak atsiri daun *Cinnamomum kinabaluensis* dan *C. subavenium* (Lauraceae)/Agusta, A.; Jamal, Y. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/ Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 81-87 1 ill., 2 tables; 5 ref.

CINNAMOMUM; MONOTERPENES; SESQUITERPENOIDS; ESSENTIAL OILS; CHEMICAL COMPOSITION; GAS CHROMATOGRAPHY; MASS SPECTROMETRY; ANALYTICAL METHODS

0754 HARAPINI, M. [Testing of chemical content and inhibition ability of *Timonius wrayi* King & Gamble leaf extracts]. Uji kandungan kimia dan daya hambat ekstrak daun jenjarum rimba (*Timonius wrayi* King & Gamble)]/ Harapini, M.; Agusta, A.; Praptiwi (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999].

Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/ Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 132-139 2 ill., 3 tables; 5 ref.

DRUG PLANTS; RUBIACEAE; STEROLS; TRITERPENOIDS; POLYURONIDES; CHEMICAL COMPOSITION; EXTRACTS; BACTERICIDES; GAS CHROMATOGRAPHY; MASS SPECTROMETRY.

#### F61 PLANT PHYSIOLOGY - NUTRITION / FISIOLOGI TANAMAN - NUTRISI

0755 NASUTION, U. Nutrient use efficiency of *Calopogonium caeruleum* cover crop and young rubber in relation to their competition. Efisiensi pemakaian hara *Calopogonium caeruleum* penutup tanah dan karet muda dalam hubungan dengan persaingannya/Nasution, U. (Universitas Islam Sumatera Utara, Medan (Indonesia)). Jurnal Agrista (Indonesia) ISSN 1410-3389 (1999) v. 3(3) p. 232-240 2 ill., 5 tables; 10 ref. Summary (In)

HEVEA BRASILIENSIS; NUTRIENTS; ABSORPTION; EFFICIENCY; CALOPOGONIUM; COVER PLANTS; PLANT COMPETITION.

#### F62 PLANT PHYSIOLOGY - GROWTH AND DEVELOPMENT / FISIOLOGI TANAMAN - PERTUMBUHAN DAN PERKEMBANGAN

0756 SETIAWAN, K. Evaluation of peanut root system in relation to drought tolerance. Evaluasi sistem perakaran kacang tanah yang berhubungan dengan tahan kekeringan/ Setiawan, K. (Universitas Lampung, Bandar Lampung (Indonesia). Fakultas Pertanian). Jurnal Agrista (Indonesia) ISSN 1410-3389 (1999) v. 3(3) p. 227-231 1 ill., 1 table; 17 ref. Summary (In)

ARACHIS HYPOGAEA; ROOT SYSTEMS; DROUGHT RESISTANCE; CYTOKININS; YIELDS.

0757 UTAMI, N.W. [Germination of *Vitchia montgomeriana* on various seed maturity level]. Perkecambahan palem putri (*Vitchia montgomeriana*) pada berbagai tingkat ketuaan benih/Utami, N.W.; Siregar, H.M. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.). Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 116-120 1 table; 7 ref.

PALMAE; SEED; GIBBERELLIC ACID; WATER; SOAKING; GERMINATION.

#### **F63 PLANT PHYSIOLOGY - REPRODUCTION / FISIOLOGI TANAMAN - REPRODUKSI**

0758 RACHMAN, E. [Flowering and fruiting pattern of *Solanum melongena* L. var. Ponti]. Pola pembungaan dan perbuahan terung Ponti (*Solanum melongena* L. var. Ponti)/Rachman, E. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.). Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 74-80 5 ref. Appendices

SOLANUM MELONGENA; ANTHERS; GYNOCIUM; FLOWERING; FRUITING; PLANT REPRODUCTIVE ORGANS.

#### **H10 PESTS OF PLANTS / HAMA TANAMAN**

0159 INSTALASI PENELITIAN DAN PENGKAJIAN TEKNOLOGI PERTANIAN, YOGYAKARTA. [Pest and disease control in chili crop by integrated pest control system]. Pengendalian hama penyakit pada tanaman cabe merah dengan sistem Pengendalian Hama Terpadu (PHT)/Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta

(Indonesia) . [Agricultural Technology Recommendation for Yogyakarta Province (Indonesia)]. Rekomendasi Teknologi Pertanian Propinsi Daerah Istimewa Yogyakarta/Musofie, A.; Wardhani, N.K.; Mudjisihono, R.; Aliudin (Eds.) Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). Yogyakarta (Indonesia): IPPTP, 1999 p. 36-40 4 ref.

CAPSICUM ANNUUM; INTEGRATED CONTROL; PEST CONTROL; DISEASE CONTROL; AGRICULTURAL POLICIES; ECOSYSTEMS.

0760 INSTALASI PENELITIAN DAN PENGKAJIAN TEKNOLOGI PERTANIAN, YOGYAKARTA. [Rat pest control using Calcium Carbide ( $\text{CaC}_2$ ) in flooded rice]. Pengendalian hama tikus (*Rattus spp*) dengan menggunakan Calsium Carbida ( $\text{CaC}_2$ ) pada padi sawah/Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia) [Agricultural Technology Recommendation for Yogyakarta Province (Indonesia)]. Rekomendasi Teknologi Pertanian Propinsi Daerah Istimewa Yogyakarta/Musofie, A.; Wardhani, N.K.; Mudjisihono, R.; Aliudin (Eds.) Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). Yogyakarta (Indonesia): IPPTP, 1999 p. 14-16 5 ref. Appendices

FLOODED RICE; RODENT CONTROL; RODENTICIDES; TECHNOLOGY TRANSFER.

0761 NURDIN, F. [Insect pests of upland rice in West Sumatra (Indonesia): its problem and control technology]. Serangga hama padi gogo di Sumatera Barat: masalah dan teknologi pengendaliannya/Nurdin, F.; Artati, F. (Balai Pengkajian Teknologi Pertanian Sukarami, Padang (Indonesia)). [Proceedings of the Seminar on Increasing National Rice Production Through Tabela (Direct Sowing) System of Lowland Rice and Utilization of Unproductive Land]. Prosiding Seminar Peningkatan Produksi Padi Nasional Melalui Sistem Tabela Padi Sawah dan Pemanfaatan Lahan Kurang Produktif/Sriyani, N.; Widodo, S.E.; Kamal, M.; Karyanto, A.; Setiawan, K.; Sembodo, D.R.J.; Pramono, E.; Hadi, M.S. (Eds.) Himpunan Ilmu Gulma Indonesia Komda Lampung; Perhimpunan Agronomi Indonesia Komisariat

Lampung; Universitas Lampung, Bandar Lampung (Indonesia). Bandar Lampung (Indonesia): HIGI; Peragi, 1999 p. 488-492 11 ref. Summary (En)

UPLAND RICE; ATERIGONA;  
CNAPHALOCROCIS MEDINALIS;  
LEPTOCORISA; LEAF CURLS; LEAF  
EATING INSECTS; STEM EATING  
INSECTS; SEED DAMAGING INSECTS;  
INSECT CONTROL; CULTURE  
TECHNIQUES; SUMATRA.

0762 SIHOMBING, D. Status of pests in *Polyanthus tuberosa*. Status hama pada sedap malam/Sihombing, D.; Djatnika, I. (Inlithi Segunung, Cianjur (Indonesia)). Jurnal Hortikultura (Indonesia) ISSN 0853-7079 (1999) v. 9(1) p. 34-39 1 ill., 1 table; 18 ref. Summaries (En, In)

ORNAMENTAL PLANTS; PEST INSECTS;  
COCCIDAE; IDENTIFICATION; LIFE  
CYCLE; COCCUS.

0763 SUPRIYATIN. [Effectivity of *Trichogrammatoidea bactrae-bactrae* released to control soybean borer insects]. Efektivitas pelepasan *Trichogrammatoidea bactrae-bactrae* untuk mengendalikan hama penggerek polong kedelai/Supriyatn (Balai Penelitian Tanaman Kacang-kacangan dan Umbi-umbian, Malang (Indonesia)). [Proceedings of Scientific Seminar and Workshop of Technology on Specific Location for Agricultural Developing with Agrobusiness Orientation]. Prosiding Seminar Ilmiah dan Lokakarya Teknologi Spesifik Lokasi dalam Pengembangan Pertanian dengan Orientasi Agribisnis/Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia) . Yogyakarta (Indonesia): IPPTP, 1998 p. 98-105 4 tables, 9 ref. Summary (In)

GLYCINE MAX; ETIELLA;  
TRICHOGGRAMMATOIDEA; PEST  
CONTROL; BIOLOGICAL CONTROL;  
YIELDS.

## H20 PLANT DISEASES / PENYAKIT TANAMAN

0764 ABDURROHIM, S. . [Controlling of blue fungi attack on wood and board: technical guide]. Pencegahan serangan jamur biru pada dolok dan papan gergajian/Abdurrohim, S.; Martono, D. Pusat Penelitian Hasil Hutan, Bogor (Indonesia). Bogor (Indonesia): Puslit Hasil Hutan, 2000 13 p. 4 ill., 5 tables; 9 ref.

GONYSTILUS; FUNGAL DISEASES; WOOD PRESERVATIVES; FUNGICIDES; DIPPING; SPRAYING.

0765 ADIYOGA, W. Baseline study for developing integrated pest management technology on hot pepper in West Java. Studi lini dasar pengembangan teknologi pengendalian hama terpadu pada tanaman cabai di Jawa Barat/Adiyoga, W.; Sinung, B.R.; Hilman, Y.; Udiarto, B.K. (Balai Penelitian Tanaman Sayuran, Lembang (Indonesia)). Jurnal Hortikultura (Indonesia) ISSN 0853-7079 (1999) v. 9(1) p. 67-83 1 ill., 17 tables; 16 ref. Summaries (En, In)

CAPSICUM ANNUUM; INTEGRATED  
CONTROL; CHEMICAL CONTROL;  
CROPPING SYSTEMS; APPLICATION  
METHODS; PEST SURVEYS; COST  
BENEFIT ANALYSIS; TECHNOLOGY  
TRANSFER; JAVA.

0766 AKIN, H.M. Characterization of peanut stripe virus (PStV) isolates originated from various provinces in Indonesia/Akin, H.M.; Sudarsono (Institut Pertanian Bogor (Indonesia). Fakultas Pertanian). Indonesian Journal of Tropical Agriculture (Indonesia) ISSN 0852-5927 (1997) v. 9(l) p. 13-20 7 ill., 2 tables; 20 ref. Summary (En)

ARACHIS HYPOGAEA; CHLOROPHYLLS;  
PATHOGENESIS; VIRUSES; IDENTIFICATION;  
GEOGRAPHICAL DISTRIBUTION; INDONESIA.

0767 SUKAMTO, S. [Capability of *Trichoderma* spp. to control *Phytophthora palmivora* on cacao]. Kemampuan jamur *Trichoderma* spp. mengendalikan penyakit *Phytophthora palmivora* pada kakao/Sukamto, S.. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Ekspos Teknologi Perkebunan: Buku 2: Peningkatan

Produktivitas dan Efisiensi Industri Perkebunan/ Dradjat, B.; Supriadi, M.; Gunawan, A.; Fadjar, U.; Nancy, C. (Eds.) Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia). Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 186-192 4 tables; 7 ref.

THEOBROMA CACAO; PHYTOPHTHORA PALMIVORA; TRICHODERMA; DISEASE CONTROL; MORTALITY.

0768 WINARTO, L. Effectiveness of areca nut fruit extract for controlling leaf rot disease on potato. Keefektifan ekstrak buah pinang untuk mengendalikan penyakit busuk daun pada tanaman kentang/Winarto, L.; Primawati, N. (Balai Pengkajian Teknologi Pertanian Gedongjohor, Medan (Indonesia)). Jurnal Hortikultura (Indonesia) ISSN 0853-7079 (1999) v. 9(1) p. 40-44 2 tables; 12 ref. Summaries (En, In)

SOLANUM TUBerosum; DISEASE CONTROL; EXTRACTS; ARECA CATECHU; PHYTOPHTHORA INFESTANS; YIELDS.

#### **H60 WEEDS AND WEED CONTROL / GULMA DAN PENGENDALIAN GULMA**

0769 ANWAR, E.K. [Weed growth condition on tidal swamp areas in South Sumatra (Indonesia)]. Tanah marginal lahan pasang surut Sumatera Selatan dengan kondisi pertumbuhan gulmanya/Anwar, E.K. (Proyek Pengembangan Sistem Usaha Pertanian Lahan Pasang Surut Sumatera Selatan, Palembang (Indonesia)). [Proceedings of the seminar on increasing national rice production through tabela (direct sowing) system of lowland rice and utilization of unproductive land]. Prosiding seminar peningkatan produksi padi nasional melalui sistem tabela padi sawah dan pemanfaatan lahan kurang produktif/Sriyani, N.; Widodo, S.E.; Kamal, M.; Karyanto, A.; Setiawan, K.; Sembodo, D.R.J.; Pramono, E.; Hadi, M.S. (Eds.) Himpunan Ilmu Gulma Indonesia Komda Lampung; Perhimpunan Agronomi Indonesia Komisariat Lampung; Universitas Lampung, Bandar Lampung (Indonesia). Bandar Lampung (Indonesia): HIGI; Peragi, 1999 p. 72-80 2 ill., 7 tables; 15 ref. Summary (En)

ORYZA SATIVA; HARVESTING LOSSES; CONTROL METHODS; WEED CONTROL;

PLANT COMPETITION; NUTRIENT UPTAKE; FARMING SYSTEMS; INTER-TIDAL ENVIRONMENT; SWAMP SOILS; SUMATRA.

0770 MOENANDIR, J. [Determination of GR50 oxyfluorfen herbicide (Goal 2E) on weed seeds from the seed bank with different soil depth on soybean (*Glycine max* L.) Merr.]. Penetapan GR50 herbisida oksifluorfen (goal 2E) pada biji dari seed bank dengan kedalaman tanah berbeda di pertanaman kedelai (*Glycine max* (L.) Merr.). Moenandir, J.; Rai, C. (Universitas Brawijaya, Malang (Indonesia). Fakultas Pertanian). Agrivita (Indonesia) ISSN 0126 0537 (1999) v. 21(1) p. 46-53 5 tables; 19 ref. Summary (En)

AMARANTHUS SPINOSUS; ELEUSINE INDICA; PORTULACA OLERACEA; SOIL SEED BANKS; FIELDS; OXYFLUORFEN; PESTICIDE SELECTIVITY; VIABILITY.

0771 SEMBODO, D.R.J. Efficacy of imazapyr + glyphosate combinations to control of weeds on mature oil palm. Efikasi kombinasi herbisida imazapir + glifosat untuk mengendalikan gulma pada kelapa sawit menghasilkan/Sembodo, D.R.J. (Universitas Lampung, Bandar Lampung (Indonesia)). Jurnal Agrista (Indonesia) ISSN 1410-3389 (1999) v. 3(3) p. 241-248 1 ill., 4 tables; 12 ref. Summary (En)

ELAEIS GUINEENSIS; WEED CONTROL; HERBICIDES; GLYPHOSATE; IMAZAPYR.

0772 SIMATUPANG, R.S. [Weed control on direct seeded lowland rice in tidal swamp area]. Pengendalian gulma pada padi sawah sistem tanam benih langsung di lahan pasang surut/Simatupang, R.S.; Sardjijo; Khairuddin (Balai Penelitian Tanaman Pangan Lahan Rawa, Banjarbaru (Indonesia)). [Proceedings of the Seminar on Increasing National Rice Production Through Tabela (Direct Sowing) System of Lowland Rice and Utilization of Unproductive Land]. Prosiding Seminar Peningkatan Produksi Padi Nasional Melalui Sistem Tabela Padi Sawah dan Pemanfaatan Lahan Kurang Produktif/Sriyani, N.; Widodo, S.E.; Kamal, M.; Karyanto, A.; Setiawan, K.; Sembodo, D.R.J.; Pramono, E.; Hadi, M.S. (Eds.) Himpunan Ilmu Gulma Indonesia Komda Lampung; Per-

himpunan Agronomi Indonesia Komisariat Lampung; Universitas Lampung, Bandar Lampung (Indonesia). Bandar Lampung (Indonesia): HIGI; Peragi, 1999 p. 345-350 3 tables; 12 ref. Summary (En)

FLOODED RICE; DIRECT SOWING; WEED CONTROL; HERBICIDES; SWAMP SOILS; APPLICATION RATES; PRODUCTION INCREASE.

#### **J10 HANDLING, TRANSPORT, STORAGE AND PROTECTION OF AGRICULTURAL PRODUCTS / PENANGANAN, TRANSPORT, PENYIMPANAN DAN PERLINDUNGAN HASIL PERTANIAN**

0773 SETYONO, A. [Study on liquid carbondisulfida using on maize beans storage]. Studi penggunaan karbondisulfida cair dalam penyimpanan jagung pipil/Setyono, A.; Nugraha, S.; Soejadi (Balai Penelitian Tanaman Padi, Sukamandi (Indonesia)). [Proceedings of Scientific Seminar and Workshop of Technology on Specific Location for Agricultural Developing with Agrobusiness Orientation]. Prosiding Seminar Ilmiah dan Lokakarya Teknologi Spesifik :okasi Dalam Pengembangan Pertanian dengan Orientasi Agribisnis/Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia) Yogyakarta (Indonesia): IPPTP, 1998 p. 70-80 5 tables, 14 ref. Summary (In)

MAIZE; STORAGE; POSTHARVEST DECAY; CARBOSULFAN; KEEPING QUALITY.

#### **J11 HANDLING, TRANSPORT, STORAGE AND PROTECTION OF PLANT PRODUCTS / PENANGANAN, TRANSPORT, PENYIMPANAN DAN PERLINDUNGAN HASIL TANAMAN**

0774 SENTANA, S. Temperature and relative humidity, their effect on onion storage. Suhu dan kelembaban nisbi, peranannya dalam penyimpanan bawang bombay/Sentana, S. (Pusat Penelitian dan Pengembangan Fisik Terapan-LIPI, Bandung (Indonesia)). Agritech (Indonesia) ISSN 0216-0455 (1998) v. 19(2) p. 55-58 2 tables; 24 ref. Summary (En)

ONIONS; STORAGE; ALLIUM CEPA; RELATIVE HUMIDITY; BIOCHEMISTRY; TEMPERATURE.

0775 SURYATMO, F.A. [Improvement of sprout handling for increasing of Indonesian green tea quality]. Perbaikan penanganan pucuk guna meningkatkan mutu teh hijau Indonesia/ Suryatmo, F.A.; Bambang, K. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Ekspos Teknologi Perkebunan: Buku 2: Peningkatan Produktivitas dan Efisiensi Industri Perkebunan/Dradjat, B.; Supriadi, M.; Gunawan, A.; Fadjar, U.; Nancy, C. (Eds.) Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia). Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 221-223 1 ill., 3 tables; 5 ref.

TEA; POSTHARVEST TECHNOLOGY; ORGANOLEPTIC PROPERTIES.

0776 SUYANTI. Effect of maturity stage on postharvest quality of Mangosteen fruit during storage. Pengaruh tingkat ketuaan terhadap mutu pascapanen buah manggis selama penyimpanan/ Suyanti; Roosmani A.B.S.T.; Sjaifullah (Balai Penelitian Tanaman Hias Pasarminggu, Jakarta (Indonesia)). Jurnal Hortikultura (Indonesia) ISSN 0853-7079 (1999) v. 9(1) p. 51-58 2 ill., 3 tables; 21 ref. Summaries (En, In)

MANGOSTEEN; RIPENING; QUALITY; STORAGE; HARVESTING; ORGANOLEPTIC PROPERTIES; CHEMICAL COMPOSITION.

0777 WASPODO, M. Harvesting at the right stage increasing the quality of banana fruit. Panen tepat waktu menaikkan kualitas buah pisang/Waspodo, M. (Balai Penelitian Tanaman Hias, Jakarta (Indonesia)). Buletin Pascapanen Horticultura (Indonesia) ISSN 1410-7740 (1999) v. 2(2) p. 14-18 6 tables; 6 ref.

BANANAS; HARVESTING DATE; QUALITY; CARBOHYDRATE CONTENT.

**J12 HANDLING, TRANSPORT, STORAGE AND PROTECTION OF FOREST PRODUCTS / PENANGANAN, TRANSPORT, PENYIMPANAN DAN PERLINDUNGAN HASIL HUTAN**

0778 MUSLICH, M. [Preservation of handicraft and furniture]. Pengawetan barang kerajinan dan mebel/Muslich, M. Eboni (Indonesia) ISSN 0853-9197 (1999) (no. 4) p. 22-33 1 table; 4 ref.

WOOD; HANDICRAFTS; FURNITURE; WOODBORERS; WOOD PRESERVATION; WOOD PRESERVATIVES.

0779 MUSLICH, M. [Role of drying and preserving on wood efficiency for furniture and handicraft in Sulawesi (Indonesia)]. Peranan pengeringan dan pengawetan dalam rangka efisiensi pemakaian kayu untuk mebel dan barang kerajinan di Sulawesi/Muslich, M. Eboni (Indonesia) ISSN 0853-9197 (1999) (no. 4) p. 34-41 1 table; 9 ref.

WOOD; HANDICRAFTS; FURNITURE; WOOD PRESERVATION; DRYING; SULAWESI.

**K01 FORESTRY - GENERAL ASPECTS / KEHUTANAN - ASPEK-ASPEK UMUM**

0780 SOENARNO. [HPH and HPHTI activities: influence factors, and their solution]. Kegiatan HPH dan HPHTI: faktor berpengaruh, permasalahan dan upaya pemecahannya/ Soenarno. Eboni (Indonesia) ISSN 0853-9197 (1998) (no. 3) p. 58-74 11 ref.

FOREST MANAGEMENT; SELECTIVE FELLING; FORESTRY DEVELOPMENT.

0781 SUMEDI, N. [Management of mangrove forests by balanced insight in Sinjai district (Indonesia)]. Upaya pengelolaan hutan mangrove yang berwawasan keseimbangan di Kabupaten Sinjai/Sumedi, N.. Eboni (Indonesia) ISSN 0853-9197 (1998) (no. 3) p. 1-9 1 ill., 3 ref.

MANGROVES; FOREST MANAGEMENT; RURAL COMMUNITIES; SITE FACTORS; SULAWESI.

0782 SUPRIADI, R. Forestry and rural development: an overview. Pembangunan kehutanan dan pedesaan: suatu tinjauan/ Supriadi, R. Eboni (Indonesia) ISSN 0853-9197 (1998) (no. 3) p. 42-57 7 ref. Summary (In)

FORESTRY DEVELOPMENT; RURAL DEVELOPMENT; SOCIAL FORESTRY; COMMUNAL FORESTS; FORESTRY POLICIES.

**K10 FORESTRY PRODUCTION / PRODUKSI HUTAN**

0783 LEMPANG, M. [Knowing some benefit of arenga]. Mengenal ragam manfaat fisik aren/ Lempang, M.; Soenarno. Eboni (Indonesia) ISSN 0853-9197 (1999) (no. 4) p. 50-59 14 ref.

ARENGA PINNATA; PLANT ANATOMY; LEAVES; FLOWERS; ROOTS; SHOOTS; STEMS; USES.

0784 RULLIATY, S. [Types of wood for statue and wood carving handicrafts in Sulawesi (Indonesia)]. Jenis-jenis kayu untuk bahan kerajinan patung dan ukiran di Sulawesi/ Rulliaty, S.. Eboni (Indonesia) ISSN 0853-9197 (1999) (no. 4) p. 12-21 2 tables; 6 ref.

WOOD; WOOD PROPERTIES; HANDICRAFTS; SULAWESI.

0785 SAMBAS, E.N. [Forest flora in Alas river side, Ketambe, Gunung Leuser National Park (Aceh, Indonesia)]. Flora hutan tepi Sungai Alas, Ketambe, Taman Nasional Gunung Leuser/Sambas, E.N. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 1-6 6 tables; 5 ref.

FOREST TREES; VEGETATION; DOMINANT SPECIES; PLANT POPULATION; NATIONAL PARKS; SUMATRA.

#### **K70 FOREST INJURIES AND PROTECTION / KERUSAKAN HUTAN DAN PERLINDUNGAN HUTAN**

0786 YUSUF, R. [Vegetation analysis and kinds of degradation in peat forest after forest fire in Tanjung Puting National Park area, Central Kalimantan (Indonesia)]. Analisis vegetasi dan degradasi jenis di hutan gambut setelah kebakaran dalam kawasan Taman Nasional Tanjung Puting, Kalimantan Tengah/ Yusuf, R. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 18-191 3 ref.

FOREST TREES; VEGETATION; FOREST FIRES; ENVIRONMENTAL DEGRADATION; NATIONAL PARKS; KALIMANTAN.

#### **L01 ANIMAL HUSBANDRY / PETERNAKAN**

0787 EKASTUTI, D.R. Responses of different strains of silkworm (*Bombyx mori*) to artificial diet/Ekastuti, D.R. (Institut Pertanian Bogor (Indonesia). Fakultas Kedokteran Hewan); Astuti, D.A.; Sastrapradja, D.; Widjajakusuma, R. Indonesian Journal of Tropical Agriculture (Indonesia) ISSN 0852-5927 (1997) v. 8(1) p. 60-63 4 tables; 9 ref. Summary (En)

BOMBYX MORI; BIOLOGICAL DIFFERENCES; CROSSBREEDING; DIET; FEED INTAKE; DIGESTIBILITY; MORTALITY; GROWTH; COCOONS; PROXIMATE COMPOSITION

0788 HANDINI, S. [Rearing of birds in Secapa, Sukabumi, West Java (Indonesia)]. Pemeliharaan burung-burung di Secapa

Sukabumi, Jawa Barat/Handini, S.; Waluyo, S.P.; Widodo, W.; Astuti, D.; Kundarmasno, A.; Suparno (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/ Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 188-191 3 ref.

BIRDS; FEEDS; FEEDING; REARING TECHNIQUES; STABLES.

0789 INSTALASI PENELITIAN DAN PENGKAJIAN TEKNOLOGI PERTANIAN, YOGYAKARTA. [Effort of saving maintenance cost of calf with shorter wean time and reduce of milking]. Upaya penghematan biaya pemeliharaan pedet sapi perah melalui pemendekan umur sapih dan pengurangan jumlah pemberian susu/Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). [Agricultural Technology Recommendation for Yogyakarta Province (Indonesia)]. Rekomendasi Teknologi Pertanian Propinsi Daerah Istimewa Yogyakarta/Musofie, A.; Wardhani, N.K.; Mudjisihono, R.; Aliudin (Eds.) Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). Yogyakarta (Indonesia): IPPTP, 1999 p. 49-52 3 tables; 7 ref. Appendices

CALVES; WEANING; MILKING; PRODUCTION COST; TECHNOLOGY TRANSFER; ECONOMIC ANALYSIS.

0790 PUSAT PENELITIAN DAN PENGEMBANGAN PETERNAKAN. [Alternative of cattle development in lowland area in the framework of strengthen national food security system]. Alternatif pengembangan sapi pada kawasan persawahan dalam rangka memperkuat sistem ketahanan pangan nasional/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Warta Penelitian dan Pengembangan Pertanian (Indonesia) ISSN 0126-4427 (2000) v. 22(2) p. 7-8

CATTLE; DEVELOPMENT POLICIES; LOWLAND; FOOD SECURITY; INDONESIA.

0791 RACHMAT, M. [Assessment of high yielding commodities development study of small ruminant in IMTGT (Indonesian Malaysian Thailand Growth Triangle). Pengkajian pengembangan komoditi unggulan ruminansia kecil di wilayah IMTGT yang berbasis LM3: Laporan Penelitian/Rachmat, M.; Iqbal, M.; Sumedi; Supadi; Wirawan; Djauhari, A.; Marisa, Y. Bogor (Indonesia): PSE, 1999 182 p. 2 ill., 33 tables; 12 ref. Appendices

GOATS; SHEEP; SUBSISTENCE FARMING; COOPERATIVE FARMING; MARKETING; INDONESIA; MALAYSIA; THAILAND.

0792 SYARIEF. [National contest of thoroughbred cat]. Kontes kucing tingkat nasional/Syarief. Agribisnis Peternakan (Indonesia) (1999) (v. 3) p. 51-53

CATS; INDONESIA.

## L02 ANIMAL FEEDING / MAKANAN TERNAK

0793 ARYOGI. [Technical feeding of *Calliandra calothyrsus* as green feed of beef cattle study for digestion value]. Teknik pemberian daun kaliandra (*Calliandra calothyrsus*) sebagai pakan hijauan sapi potong, suatu kajian terhadap nilai kecernaan/ Aryogi; Umiyah, U. (Instalasi Penelitian dan Pengkajian Teknologi Pertanian Grati, Pasuruan (Indonesia)); Tangendjaja, B. [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 539-545 8 tables; 5 ref. Summary (In)

BEEF CATTLE; FEEDING SYSTEMS; CALLIANDRA CALOTHYRSUS; GREEN FEED; DIGESTION; GLIRICIDIA SEPIUM.

0794 HANDINI, S. [Effort of *Trichoglossus haematodus* captivity]. Upaya menangkarkan burung kasturi (*Trichoglossus haematodus*)/ Handini, S.; Astuti, D. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor

(Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 174-176 1 table; 1 ref.

PSITTACIFORMES; ADAPTATION; FEEDS; CAPTIVITY.

0795 HANDINI, S. [Feeding technique and reproduction of *Lorius lory* in captivity]. Tehnik pemberian pakan dan perkembangbiakan *Lorius lory* dalam penangkaran/Handini, S. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/ Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 167-170 6 ref.

PSITTACIFORMES; FEEDS; FEEDING; REPRODUCTION; CAPTIVITY.

0796 HANDINI, S. [Preliminary study on two young *Lorius garrulus* types]. Studi awal dua anak jenis nuri Ternate (*Lorius garrulus*)/ Handini, S. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/ Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 171-173 2 tables; 3 ref.

PSITTACIFORMES; FEEDS; FEEDING; CAPTIVITY.

0797 HARYANTO, B. [Probiotic advantages in increasing of feed efficiency in rumen]. Manfaat probiotik dalam peningkatan efisiensi fermentasi pakan di dalam rumen/Haryanto, B.; Mathius, I.W.; Lubis, D.; Martawidjaja, M.

(Balai Penelitian Ternak Ciawi, Bogor (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 635-641 3 tables; 28 ref. Summary (In)

RUMINANTS; FEEDS; FERMENTATION; PROBIOTICS; BIODEGRADATION; RUMEN

0798 INSTALASI PENELITIAN DAN PENGKAJIAN TEKNOLOGI PERTANIAN, YOGYAKARTA. [Effort of feed improvement using flushing method to increase goat productivity on dry farming in Yogyakarta (Indonesia)]. Upaya perbaikan pakan dengan metode flushing untuk meningkatkan produktivitas ternak kambing di wilayah lahan kering Propinsi Daerah Istimewa Yogyakarta/Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). [Agricultural Technology Recommendation for Yogyakarta Province (Indonesia)]. Rekomendasi Teknologi Pertanian Propinsi Daerah Istimewa Yogyakarta/Musofie, A.; Wardhani, N.K.; Mudjisihono, R.; Aliudin (Eds.) Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). Yogyakarta (Indonesia): IPPTP, 1999 p. 41-44 2 tables; 10 ref. Appendices

GOATS; FEEDS; DRY FARMING; FLUSHING; TECHNOLOGY TRANSFER; PREGNANCY.

0799 INSTALASI PENELITIAN DAN PENGKAJIAN TEKNOLOGI PERTANIAN, YOGYAKARTA. [Urea molasses block heat method as feed supplement for ruminant livestock]. Urea Molasses Blok (UMB) metode panas sebagai pakan suplemen untuk ternak ruminansia/Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). [Agricultural Technology Recommendation for Yogyakarta Province (Indonesia)]. Rekomendasi Teknologi Pertanian Propinsi Daerah Istimewa Yogyakarta/Musofie, A.; Wardhani, N.K.; Mudjisihono, R.; Aliudin (Eds.). Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). Yogyakarta (Indonesia): PUSLITBANGNAK, 1998 p. 527-537 Summary (In)

nnesia): IPPTP, 1999 p. 53-57 4 tables; 3 ref. Appendices

RUMINANTS; SUPPLEMENTS; MOLASSES; COST BENEFIT ANALYSIS; TECHNOLOGY TRANSFER; ECONOMIC ANALYSIS.

0800 SASANGKA, B.H. [Utilization of pollard and waste soy sauce as supplement for cattle fattening]. Penggunaan pollard dan ampas kecap sebagai penyusun suplemen untuk penggemukan sapi/Sasangka, B.H.; Suharyono (Pusat Aplikasi Isotop dan Radiasi, Batan Jakarta (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 519-525 4 ill.; 11 ref.. Summary (In)

BEEF CATTLE; FATTINGEN; POLLARD SYSTEMS; BYPRODUCTS; FEED ADDITIVES.

0801 SITEPU, P. [Study of local shall cattle potency for feedlot fattening effort]. Studi potensi sapi bakalan lokal untuk usaha penggemukan komersil (feedlot)/Sitepu, P.; Panggabean, T.; Matondang, R.; Supriyatna, N.; Putu, I.G.; Suparyanto, A. (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 527-537 Summary (In)

CATTLE; FATTINGEN; FEEDLOTS.

0802 SUHARYONO. [Biological value evaluation and leaves mineral content of *Gliricidia maculata* and *Enterolobium cyclocarpum* as feed supplement by using isotope P-32 radio and neutron activation analysis]. Evaluasi nilai biologis dan kandungan mineral daun pohon *Gliricidia maculata* dan *Enterolobium cyclocarpum* sebagai pakan

suplemen dengan menggunakan radio isotop P-32 dan analisa pengaktifan netron/Suharyono (Badan Tenaga Atom Nasional, Jakarta (Indonesia). Pusat Aplikasi Isotop dan Radiasi). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 643-650 5 tables; 12 ref. Summary (In)

GOATS; WATER BUFFALOES; CATTLE; GLIRICIDIA SEPIUM; ENTEROLOBIUM; FEEDS; SUPPLEMENTS; RADIOISOTOPES; NEUTRON ACTIVATION ANALYSIS.

0803 SUNANDAR, N. [Bioplus advantage on fattening Friesian Holstein bull in Leles, Garut, West Java, Indonesia]. Manfaat bioplus dalam penggemukan sapi Friesian Holstein (FH) jantan di Kecamatan Leles, Kabupaten DT. II Garut/Sunandar, N.; Sugandi, D.; Budiman; Marbun, O. (Balai Penelitian dan Pengkajian Teknologi Pertanian Lembang, Bandung (Indonesia)); Widayati; Kusnadi, U.. [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 505-509 2 tables; 6 ref. Summary (In)

BEEF CATTLE; FATTENING; BIOTYPES; ECONOMIC ANALYSIS.

0804 WALUYO, S.P. [Captivity aspects of *Loriculus galgulus* in stable]. Aspek-aspek penangkaran burung serindit Sumatera (*Loriculus galgulus*) dalam kandang/Waluyo, S.P. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 181-184 5 ref.

PSITTACIFORMES; FEEDS; FEEDING; METABOLISM; CAPTIVITY; SUMATRA.

0805 WALUYO, S.P. [Effort of *Cacatua galerita* captivity in Balitbang Zoologi, Puslitbang Biologi (Bogor, Indonesia)]. Upaya penangkaran burung kakatua putih jambul kuning (*Cacatua galerita*) di Balitbang Zoologi, Puslitbang Biologi-LIPI/Waluyo, S.P. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 177-180 4 ref.

PSITTACIFORMES; FEEDS; FEEDING; REPRODUCTION; CAPTIVITY.

0806 ZULBARDI, M. [Improvement of buffalo resource of feed repair in Sabatolang Village, Sipirok, South Tapanuli, Sumatra (Indonesia)]. Peningkatan sumberdaya kerbau melalui perbaikan pakan di desa Sabatolang, Kecamatan Sipirok, Kabupaten Tapanuli Selatan/Zulbardi, M.; Batubara, L.P.; Siregar, A.R.; Wilson, A.; Basuno, E. (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 547-553 4 tables; 10 ref. Summary (In)

WATER BUFFALOES; FEEDS; ANIMAL NUTRITION; BODY WEIGHT; PROXIMATE COMPOSITION; BODY MEASUREMENTS; SUMATRA.

0807 ZULBARDI, M. [Distribution of block molasses for improvement of buffalo production performance in Bulu Agung Village, Pesanggaran Sub district, Banyuwangi, East Java (Indonesia)]. Pemberian molases blok untuk perbaikan penampilan produksi ternak kerbau di Desa Bulu Agung, Kecamatan

Pesanggaran, Kabupaten Banyuwangi, Jawa Timur/Zulbardi, M.; Diwyanto, K.; Siregar, A.R.; Basuno, E.; Thalib, A.; Supriyatna, N. (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 585-594 10 tables; 10 ref. Summary (In)

WATER BUFFALOES; MOLASSES; NUTRITIVE VALUE; BODY WEIGHT; BODY MEASUREMENTS; GREEN FEED.

#### **L10 ANIMAL GENETICS AND BREEDING / GENETIKA DAN PEMULIAAN TERNAK**

0808 ADIATI, U. [Biological synchronization of passion on Etawah crossbreds]. Sinkronisasi birahi secara biologis pada kambing Peranakan Etawah/Adiati, U.; Sianturi, RSG.; Chaniago, T.D.; Sutama, I-K. (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 411-415 3 tables; 16 ref. Summary (In)

GOATS; CROSSBREDS; PMSG; PROGESTERONE; REPRODUCTION; ANIMAL PRODUCTION.

0809 ASTUTI, D. [Genetic variation of cacatua groups based on cytochrome-B gen analysis]. Variasi genetik kelompok burung kakatua berdasarkan analisis gen cytochrome-B/Astuti, D. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.). Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 323-330 3 ill., 5 ref.

BIOLOGI, 1999 p. 219-225 2 ill., 3 tables; 7 ref.

PSITTACIFORMES; DNA; MITOCHONDRIA; PCR; RESTRICTED ENZYMES; CYTOCHROME B; GENETIC VARIATION.

0810 INSTALASI PENELITIAN DAN PENGKAJIAN TEKNOLOGI PERTANIAN, YOGYAKARTA. [Artificial insemination method on goats]. Metode inseminasi buatan pada ternak kambing ditinjau dari waktu pelaksanaan/Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). [Agricultural Technology Recommendation for Yogyakarta Province (Indonesia)]. Rekomendasi Teknologi Pertanian Propinsi Daerah Istimewa Yogyakarta/Musofie, A.; Wardhani, N.K.; Mudjisihono, R.; Aliudin (Eds.). Instalasi Penelitian dan Pengkajian Teknologi Pertanian, Yogyakarta (Indonesia). Yogyakarta (Indonesia): IPPTP, 1999 p. 45-48 1 table; 9 ref. Appendices

GOATS; ARTIFICIAL INSEMINATION; TECHNOLOGY TRANSFER; ECONOMIC ANALYSIS.

0811 SAID, D.S. [Assessment of genetic diversity of some Melanotaenia species through mitochondria DNA (mtDNA) using PCR technique]. Kajian keanekaragaman genetik beberapa spesies ikan pelangi Irian melalui mitokondria DNA (mtDNA) dengan teknik PCR/Said, D.S.; Tanjung, L.R. (Pusat Penelitian dan Pengembangan Limnologi-LIPI, Bogor (Indonesia)); Carman, O. [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.). Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 323-330 3 ill., 5 ref.

ORNAMENTAL FISHES; SPECIES; MITOCHONDRIA; DNA; PCR; GENETIC VARIATION.

0812 SETIOKO, A.R. [Artificial insemination on duck]. Inseminasi buatan pada itik/Setioko, A.R. (Balai Penelitian Ternak Ciawi, Bogor

(Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 495-502 29 ref. Summary (In)

DUCKS; ARTIFICIAL INSEMINATION; REPRODUCTION; SEMEN.

0813 SETIOKO, A.R. [Selection programme of Magelang ducks in village breeding centre: Production of basic population and selection programme]. Program seleksi itik Magelang pada village breeding centre: Pembuatan populasi dasar dan program seleksi/Setioko, A.R.; Prasetyo, L.H.; Rahardjo, Y.C.; Setiadi, P.; Murtisari, T. (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)); Wiloeto D.. [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 487-494 4 tables; 7 ref. Summary (In)

DUCKS; ANIMAL BREEDING; SELECTION; HATCHING; FEEDS; JAVA.

## L20 ANIMAL ECOLOGY / EKOLOGI HEWAN DARAT

0814 DARJONO. [Survey of little *Cacatua sulphurea* in Nusa Penida, Bali (Indonesia)]. Survei burung kakatua kecil, jambul kuning (*Cacatua sulphurea*) di Nusa Penida, Bali/ Darjono; Hartini, S. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 157-163 1 table; 10 ref. Appendix

PSITTACIFORMES; ANIMAL POPULATION; HABITATS; SURVEYS; BALI.

0815 HANDAYANI, H.K. [Behaviour of *Psittacula alexandri alexandri* in captivity of Balitbang Zoologi, Bogor (Indonesia)]. Perilaku burung betet Jawa (*Psittacula alexandri alexandri*) di penangkaran Balitbang Zoologi Bogor/Handayani, H.K.; Prijono, S.N.; Muladno (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 215-218 6 ref.

PSITTACIFORMES; BEHAVIOUR; CAPTIVITY; JAVA.

0816 HANDINI, S. [Captive effort of two young *Eclectus roratus* types]. Upaya penangkaran dua anak jenis burung bayan (*Eclectus roratus*)/Handini, S. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 164-166 5 ref.

PSITTACIFORMES; FEEDS; EGGS; REPRODUCTION; CAPTIVITY.

0817 HERAWATI, N. [Study on daily behaviour of *Lorius lory*]. Studi perilaku harian burung nuri kepala hitam (*Lorius lory*)/ Herawati, N.; Prijono, S.N.; Muladno (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia).

Bogor (Indonesia): Puslitbang Biologi, 1999 p. 210-214 11 ref.

PSITTACIFORMES; BEHAVIOUR; CAPTIVITY.

0818 PUTU, I.G. [Role of genetic characteristic for death hope of young sheep after birth]. Peran sifat keindukan terhadap penurunan angka kematian anak domba segera setelah lahir/Putu, I.G. (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/ Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 437-456 6 tables. Bibliography (p.451-456). Summary (In)

SHEEP; GENETICS; MORTALITY; PARTURITION; MATERNAL BEHAVIOUR; FEEDS.

0819 ROSTIKA, I. [Study on individual behaviour of male and female *Eclectus roratus* captivated in groups]. Studi perilaku individu burung bayan (*Eclectus roratus*) jantan dan betina yang ditangkarkan secara berkelompok/Rostika, I.; Prijono, S.N.; Muladno (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.). Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 194-200 1 table; 7 ref.

PSITTACIFORMES; FEEDS; BEHAVIOUR; CAPTIVITY.

0820 SAIM, A. [Captivity model of Timor deer (*Cervus timorensis*) in Jonggol, Bogor, West Java and villages around Rawa Aopa National Park, Southeast Sulawesi]. Model penangkaran rusa Timor (*Cervus timorensis*) di Jonggol, Bogor, Jawa Barat dan desa-desa sekitar Taman Nasional Rawa Aopa, Propinsi

Sulawesi Tenggara/Saim, A.; Zein, M.S.A.; Koestoto (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 226-231 1 ill., 1 table; 3 ref.

CERVUS; REPRODUCTION; FEEDS; FEEDING; CAPTIVITY; JAVA; SULAWESI.

0821 WIDIASIH, W. [Study on behaviour of *Eos squamata* captivated in Balitbang Zoologi (Bogor, Indonesia)]. Studi perilaku burung (*Eos squamata*) yang ditangkarkan di Balitbang Zoologi/Widiasih, W.; Prijono, S.N.; Muladno (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 201-209 2 tables; 8 ref.

PSITTACIFORMES; BEHAVIOUR; CAPTIVITY.

0822 WIDODO, W. [Survey of curved-beak birds (Psittacidae) in Donggala District, Central Sulawesi]. Survei burung-burung paruh bengkok (Psittacidae) di Kabupaten Donggala, Sulawesi Tengah/Widodo, W.; Mansur, M.; Muslihun, M. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.). Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 147-156 2 tables; 7 ref.

PSITTACIFORMES; BIODIVERSITY; HABITATS; SURVEYS; SULAWESI.

**L40 ANIMAL STRUCTURE / MORFOLOGI DAN ANATOMI HEWAN**

0823 SARTIKA, T. [Fixation of genetic internal on local chicken along blood protein polymorphism]. Penentuan jarak genetik pada ayam lokal melalui polimorfisme protein darah/ Sartika, T. (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)); Mulyono, R.H.; Mansyoer, S.S.; Purwadaria, T.; Gunawan, B.. [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 385-390 2 tables; 7 ref. Summary (In)

CHICKENS; GENETIC POLYMORPHISM; BLOOD PROTEINS; BLOOD PLASMA; PROGESTERONE.

0824 SETIADI, B. [Comparative of goat morphologic]. Komparatif morfologik kambing/ Setiadi, B.; Priyanto, D.; Martawidjaja, M. (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 291-299 2 tables; 11 ref. Summary (In)

GOATS; ANIMAL MORPHOLOGY; BODY PARTS; BODY WEIGHT.

**L53 ANIMAL PHYSIOLOGY - REPRODUCTION / FISIOLOGI TERNAK - REPRODUKSI**

0825 HASTONO. [Influence of age on sexual work in Etawah mixed ethnic origins goat]. Pengaruh umur terhadap kinerja seksual pada kambing jantan Peranakan Etawah/Hastono; Budiarsana, IGM.; Sianturi, RSG.; Adiati, U.; Sutama, I-K. (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2].

Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 385-390 2 tables; 7 ref. Summary (In)

GOATS; CROSSBREDS; SEXUAL REPRODUCTION; LIBIDO; AGE.

0826 HASTONO. [Passion together on St. Choix sheep]. Penyerentakan birahi pada domba betina St. Choix/Hastono; Inounu, I.; Hidayati, N. (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 457-461 2 ill.; 1 table; 13 ref. Summary (In)

SHEEP; PROGESTERONE; SEXUAL REPRODUCTION.

0827 HENDRI. [The addition of several serum types on TCM-199 for cattle embryo production by in vitro fertilization technique]. Penambahan berbagai jenis serum pada medium TCM-199 untuk produksi embrio sapi melalui teknik fertilisasi in vitro/Hendri (Universitas Andalas, Padang (Indonesia). Fakultas Peternakan). Jurnal Peternakan dan Lingkungan (Indonesia) ISSN 0852-4092 (1999) v. 5(03) p. 1-8 4 tables; 20 ref. Summary (En)

CATTLE; IN VITRO FERTILIZATION; EMBRYO CULTURE; MATURATION; OVA.

0828 SIANTURI, RSG. [Sexual synchronization as hormonal on Etawah (PE) crossbred]. Sinkronisasi berahi secara hormonal pada kambing Peranakan Etawah/Sianturi, RSG.; Adiati, U.; Hastono; Budiarsana, IGM.; Sutama, I-K. (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)) [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan,

Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 379-384 3 tables; 10 ref. Summary (In)

GOATS; CROSSBREDS; PMSG; SEXUAL REPRODUCTION; PROGESTERONE.

0829 SUMARYADI, M.Y. [Utilization of some hormone profile and blood metabolite of sheep during pregnancy as predictor for success reproduction support: predictioon quantity of child, weight gain, growth of mammary gland]. Pemanfaatan beberapa profil hormon dan metabolit darah induk domba selama kebuntingan sebagai prediktor untuk menunjang keberhasilan reproduksi: prediksi jumlah anak, bobot lahir, pertumbuhan kelenjar susu dan produksi susu/Sumaryadi, M.Y. (Universitas Jenderal Sudirman, Purwokerto (Indonesia)); Manalu, W.. [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 425-436 4 ill.; 2 tables. Bibliography (p. 430-436). Summary (In)

SHEEP; HORMONES; METABOLITES; REPRODUCTION; BIRTH WEIGHT; MAMMARY GLANDS; MILK YIELD; PREGNANCY.

0830 SUTAMA, I-K. [Sexual activity after breeds from dairy goat of Etawah mixed ethnic origins with different milk production]. Aktivitas seksual setelah beranak dari kambing perah peranakan Etawah dengan tingkat produksi susu yang berbeda/Sutama, I-K.; Setiadi, B.; Budiarsana, IGM.; Adiaty, U. (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 401-409 2 ill.; 2 tables; 23 ref. Summary (In)

GOATS; CROSSBREDS; MILK PRODUCTION; REPRODUCTION; BODY WEIGHT; PROGESTERONE.

0831 TJIPTOSUMIRAT, T. [Influence of supplementation in Etawah crossbred (PE) recently pregnant in embryo Central Java (Indonesia)]. Pengaruh suplementasi pada masa akhir kebuntingan kambing peranakan Etawah (PE) di Sumberejo Jawa Tengah/Tjiptosumirat, T. (Pusat Aplikasi Isotop dan Radiasi, Batan, Jakarta (Indonesia)); Santoso. [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 601-607 3 ill.; 2 tables. Summary (In)

GOATS; CROSSBREDS; NUTRIENT INTAKE; PREGNANCY; SUPPLEMENTS; BYPRODUCTS; JAVA.

0832 WALUYO, S.P. [Reproduction of young *Eos squamata* in stable]. Perkembangbiakan anakan burung kasturi violet (*Eos squamata*) dalam kandang/Waluyo, S.P. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 185-187 2 ref.

PSITTACIFORMES; REPRODUCTION; CAPTIVITY.

0833 WIJONO, D.B. [Utilizing efficiency of fat tail sheep as germ source]. Efisiensi penggunaan jantan pemacek domba ekor gemuk sebagai sumber bibit/Wijono, D.B.; Ma'sum, K. (Instalasi Penelitian dan Pengkajian Teknologi Pertanian Grati, Pasuruan (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 463-468 3 ill.; 1 table; 6 ref. Summary (In)

SHEEP; SEMEN; LIBIDO; EJACULATION;  
SEXUAL REPRODUCTION;  
SPERMATOZOA.

0834 YULISTIANI, D. [Type and chemical composition of sheep green feed in Sukabumi district and Semarang (Indonesia)]. Jenis dan komposisi kimia hijauan pakan ternak domba di Kabupaten Sukabumi dan Kabupaten Semarang/Yulistiani, D.; Setiadi, S.; Subandriyo (Balai Penelitian Ternak Ciawi, Bogor (Indonesia)). [Proceeding of the National Seminar of Animal Husbandry and Veterinary, Bogor 18-19 November 1997. Book 2]. Prosiding Seminar Nasional Peternakan dan Veteriner, Bogor 18-19 November 1997. Jilid 2/Pusat Penelitian dan Pengembangan Peternakan, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANGNAK, 1998 p. 615-619 3 tables; 5 ref. Summary (In)

SHEEP; GREEN FEED; CHEMICAL COMPOSITION; JAVA.

0835 YUPARDHI, W.S. Biological reproduction and performance of kacang goat fed with different levels of Leucaena/Yupardhi, W.S.; Mendra, I.K.; Pastika, I.M.; Oka, I.G.M.; Suarjaya, I.M. Jurnal Peternakan dan Lingkungan (Indonesia) ISSN 0852-4092 (1999) v. 5(03) p. 9-13 1 table; 12 ref. Summary (In)

GOATS; FEEDING; LEUCAENA LEUCOCEPHALA; REPRODUCTIVE PERFORMANCE; FEED CONVERSION EFFICIENCY; WEIGHT GAIN.

#### **L70 VETERINARY SCIENCE AND HYGIENE - GENERAL ASPECTS / ILMU VETERINER DAN KESEHATAN HEWAN - ASPEK UMUM**

0836 RIZKY. [Oversease disease must be monitored]. Penyakit dari luar negeri tak boleh dipandang sebelah mata/Rizky. Agribisnis Peternakan (Indonesia) (1999) v. 03 p. 41-43

LIVESTOCK; ANIMAL DISEASES; INDONESIA.

#### **L73 ANIMAL DISEASES / PENYAKIT HEWAN**

0837 SETYORINI, L.E. [Parasites in curved-beak birds (Psittaciformes)]. Parasit pada burung paruh bengkok/Setyorini, L.E.; Hartini, S.; Purwaningsih, E. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 192-193 4 ref.

PSITTACIFORMES; EIMERIA; COCIDIOSIS; ANIMAL DISEASES.

0838 SOESETYA, R.H.B. [Helminthiasis in beef cattle in Asrikaton village of Malang Regency]. Helminthiasis pada sapi potong di desa Asrikaton, Kabupaten Malang/Soesetya, R.H.B.; Priyandono, D. Jurnal Peternakan dan Lingkungan (Indonesia) ISSN 0852-4092 (1999) v. 5(03) p. 18-23 1 ill., 2 tables; 12 ref. Summary (En)

BEEF CATTLE; HELMINTHOSES; FASCIOLA; BUNOSTOMUM; MORBIDITY; ARID CLIMATE; HUMID CLIMATE; JAVA.

#### **L74 MISCELLANEOUS ANIMAL DISORDERS / KELAINAN YANG BUKAN DISEBABKAN OLEH HAMA DAN PENYAKIT PADA HEWAN**

0839 MANALU, W. Responses of heat-stressed lactating Holstein cows to short-term recombinant bovine somatotropin treatment: III. Changes in metabolic and stress hormones and body lipid metabolism/Manalu, W. (Institut Pertanian Bogor (Indonesia). Fakultas Kedokteran Hewan). Indonesian Journal of Tropical Agriculture (Indonesia) ISSN 0852-5927 (1997) v. B(l) p. 1-5 1 table; 21 ref. Summary (En)

CATTLE; THERMAL STRESS; SOMATOTROPIN; PROLACTIN; GLUCOCORTICOIDS.

**M01 FISHERIES AND AQUACULTURE - GENERAL ASPECTS / PERIKANAN DAN BUDIDAYA PERAIRAN - ASPEK UMUM**

0840 GAFFAR, A.K. [Technology availability and fresh water fishery research program 1999/2000. Ketersediaan teknologi dan program penelitian perikanan air tawar perairan umum 1999/2000/Gaffar, A.K. (Loka Penelitian Perikanan Air Tawar, Palembang (Indonesia)). Palembang (Indonesia): Loka Penelitian Perikanan Air Tawar, 1999 12 p.

PANGASIUS; LEPTOBARBUS HOEVENI; MYSTUS; WASTE MANAGEMENT; INLAND FISHERIES; PONDS.

0841 KARTONO, G. [Status and development of coastal culture in South East Sulawesi (Indonesia)]. Status dan pengembangan budidaya pantai di Sulawesi Tenggara/Kartono, G. (Balai Pengkajian Teknologi Pertanian, Kendari (Indonesia)); Rasjid, F. [Proceeding on National Seminar: Research and Dissemination of Marine and Coastal]. Prosiding Seminar Nasional Penelitian dan Diseminasi Teknologi Budidaya Laut dan Pantai/Suradjat, A.; Heruwati, E.S.; Wahyudi, N.A.; Astuti, I.R. (Eds.) Pusat Penelitian dan Pengembangan Perikanan, Jakarta (Indonesia). Jakarta (Indonesia): PUSLITBANGKAN, 1999 p. 44-49 5 tables; 15 ref.

PRAWNS AND SHRIMPS; SEAWEEDS; AQUACULTURE; MANGROVES; SULAWESI.

0842 SUKADI, F. [Fishery resources management for agricultural development support]. Pengelolaan sumberdaya kelautan untuk mendukung pembangunan pertanian andalan/ Sukadi, F. (Pusat Penelitian dan Pengembangan Perikanan, Jakarta (Indonesia)). [Research Result Report of Workshop on Reposition of Agricultural Sector to National Economic]. Laporan Hasil Kegiatan Lokakarya Reposisi Sektor Pertanian Menjadi Andalan Ekonomi Nasional/Pusat Penelitian Sosial Ekonomi Pertanian Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (pt.1) 19 p. 4 ref. Appendices

SULAWESI; FISHERY RESOURCES; USES; RESOURCES MANAGEMENT; AGRI-

CULTURAL DEVELOPMENT; STOCK ASSESSMENT.

**M12 AQUACULTURE PRODUCTION AND MANAGEMENT / PRODUKSI DAN PENGELOLAAN BUDIDAYA PERAIRAN**

0843 IKENOUE, H. Technology dissemination system for marine aquaculture in Japan comparison of fisheries extension systems between Japan and Indonesia/Ikenoue, H. (Japan Information Corporation Agency, Jakarta (Indonesia)). [Proceeding on National Seminar Research and Dissemination of Marine and Coastal]. Prosiding Seminar Nasional Penelitian dan Diseminasi Teknologi Budidaya Laut dan Pantai/Suradjat, A.; Heruwati, E.S.; Wahyudi, N.A.; Astuti, I.R. (Eds.) Pusat Penelitian dan Pengembangan Perikanan, Jakarta (Indonesia). Jakarta (Indonesia): PUSLITBANGKAN, 1999 p. 56-60 2 ill.

MARINE; FISHERIES; AQUACULTURE; EXTENSION ACTIVITIES; ADVISORY OFFICERS; INDONESIA; JAPAN.

0844 SAID, D.S. [Growth pattern of *Melanotaenia praecox* on recirculation system]. Pola pertumbuhan ikan pelangi Irian (*Melanotaenia praecox*) pada sistem resirkulasi/ Said, D.S.; Fauzi, H. (Pusat Penelitian dan Pengembangan Limnologi-LIPI, Bogor (Indonesia)) [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 331-336 1 ill., 2 tables; 4 ref.

ORNAMENTAL FISHES; FISH LARVAE; FISH FEEDING; WATER CIRCULATION; FISH CULTURE; GROWTH.

0845 SIREGAR, Z. [Dissemination of marine and coastal culture technology in North Sumatra province (Indonesia)]. Diseminasi teknologi budidaya laut dan pantai di propinsi Sumatera Utara/Siregar, Z. (Dinas Perikanan Propinsi Dat

I Sumatera Utara, Medan (Indonesia). [Proceeding on National Seminar: Research and Dissemination of Marine and Coastal]. Prosiding Seminar Nasional Penelitian dan Diseminasi Teknologi Budidaya Laut dan Pantai/Suradjat, A.; Heruwati, E.S.Wahyudi, N.A.; Astuti, I.R. (Eds.) Pusat Penelitian dan Pengembangan Perikanan, Jakarta (Indonesia). Jakarta (Indonesia): PUSLITBANGKAN, 1999 p. 30-36 5 tables

SUMATRA; EPINEPHELUS; PENAEUS MONODON; FISH CULTURE; FISHING METHODS; DIFFUSION OF INFORMATION; TECHNOLOGY TRANSFER.

0846 ZAKARIA, A. [Human resources development for dissemination and innovation of marine and coastal culture]. Pengembangan sumberdaya manusia untuk diseminasi dan inovasi budidaya laut dan pantai/Zakaria, A. (Sekretariat Badan Diklat Pertanian Pertanian, Jakarta (Indonesia)). [Proceeding on National Seminar: Research and Dissemination of Marine and Coastal]. Prosiding Seminar Nasional Penelitian dan Diseminasi Teknologi Budidaya Laut dan Pantai/Suradjat, A.; Heruwati, E.S.; Wahyudi, N.A.; Astuti, I.R. (Eds.) Pusat Penelitian dan Pengembangan Perikanan, Jakarta (Indonesia). Jakarta (Indonesia): PUSLITBANGKAN, 1999 p. 22-29 3 ill., 4 tables

COASTAL FISHERIES; HUMAN RESOURCES; EDUCATIONAL INSTITUTIONS; DIFFUSION OF INFORMATION; TECHNOLOGY TRANSFER.

## N01 AGRICULTURAL ENGINEERING / REKAYASA PERTANIAN

0847 BAHRI, S. [Engineering and development of sugar cane heating technology for efficiency improvement]. Rekayasa dan pengembangan teknologi pemanasan nira tebu untuk meningkatkan efisiensi/Bahri, S. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Ekspos Teknologi Perkebunan: Buku 2: Peningkatan Produktivitas dan Efisiensi Industri Perkebunan/ Dradjat, B.; Supriadi, M.; Gunawan, A.; Fadjar, U.; Nancy, C. (Eds.) Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 153-161 9 ill., 1 table; 10 ref.

U.; Nancy, C. (Eds.) Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia). Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 153-161 9 ill., 1 table; 10 ref.

SUGARCANE; HEAT EXCHANGERS; EQUIPMENT PERFORMANCE; HEAT TRANSFER.

0848 SRI-MULATO. [Research results of machinery process and engineering for supporting rural agroindustry development based on cacao]. Hasil penelitian proses dan rekayasa Alsin untuk mendukung pengembangan agroindustri pedesaan berbasis kakao/Sri-Mulato; Widjotomo, S.; Atmawinata, O.; Handaka. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Ekspos Teknologi Perkebunan: Buku 2: Peningkatan Produktivitas dan Efisiensi Industri Perkebunan/Dradjat, B.; Supriadi, M.; Gunawan, A.; Fadjar, U.; Nancy, C. (Eds.). Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia). Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 193-205 5 ill., 20 ref. Appendix

THEOBROMA CACAO; FOOD INDUSTRY EQUIPMENT; AGROINDUSTRIAL SECTOR; SORTING EQUIPMENT; TECHNOLOGY TRANSFER.

## N20 AGRICULTURAL MACHINERY AND EQUIPMENT / MESIN-MESIN DAN PERALATAN PERTANIAN

0849 HARJONO. [Planting and fertilizer equipment TPH-10R type for dryland]. Alat tanam benih dan pemupuk tipe TPH-10R untuk lahan kering/Harjono; Purwanta, C.Y.; Mulyantara, L.T. (Balai Besar Alat dan Mesin Pertanian, Serpong (Indonesia)). Warta Penelitian dan Pengembangan Pertanian (Indonesia) ISSN 0126-4427 (2000) v. 22(2) p. 5-6 1 ill.

FOOD CROPS; SEED; PLANTING EQUIPMENT; FERTILIZER EQUIPMENT; DRY FARMING.

0850 JOHAN, E. [Picking with B type scissor in tea plantation]. Pemetikan dengan gunting tipe B di perkebunan teh/Johan, E.. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Eksposo Teknologi Perkebunan: Buku 2: Peningkatan Produktivitas dan Efisiensi Industri Perkebunan/Dradjat, B.; Supriadi, M.; Gunawan, A.; Fadjar, U.; Nancy, C. (Eds.) Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia). Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 216-220 3 tables; 12 ref.

THEOBROMA CACAO; PICKING; CUTTING IMPLEMENTS.

0851 SOENARNO. [Utilization of logging equipment and its problems on selected logging system]. Penggunaan alat-alat berat dan permasalahannya pada kegiatan pengusahaan hutan alam sistem TPTI/Soenarno. Eboni (Indonesia) ISSN 0853-9197 (1998) (no. 3) p. 21-33 5 ill., 2 tables; 4 ref.

LOGGING EQUIPMENT; SELECTIVE FELLING; LAND CLEARING; LOGGING.

0852 SUNANTYO. [Designing of palm sugar processing unit with vacuum system to produce high quality palm sugar]. Rancang bangun unit pengolah gula kelapa dengan sistem vakum untuk membuat gula semut berkualitas tinggi/Sunantyo; Utami, S.; Santoso, B.E.; Bachtiar, A. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Eksposo Teknologi Perkebunan: Buku 2: Peningkatan Produktivitas dan Efisiensi Industri Perkebunan/Dradjat, B.; Supriadi, M.; Gunawan, A.; Fadjar, U.; Nancy, C. (Eds.) Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia). Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 143-152 6 ill., 6 tables; 17 ref.

SUGAR; SUGAR PALMS; PROCESSING; FOOD INDUSTRY; EQUIPMENT; PROXIMATE COMPOSITION.

## P01 NATURE CONSERVATION AND LAND RESOURCES / KONSERVASI SUMBERDAYA ALAM DAN SUMBERDAYA LAHAN

0853 ADIMIHARDJA, A. [Land and water resources management for supporting agriculture development. Pengelolaan sumberdaya lahan dan air untuk mendukung pembangunan pertanian/Adimihardja, A.; Hidayat, A.; Ardi, D.. [Research Result Report of Workshop on Reposition of Agricultural Sector to National Economic]. Laporan Hasil Kegiatan Lokakarya Reposisi Sektor Pertanian Menjadi Andalan Ekonomi Nasional/Pusat Penelitian Sosial Ekonomi Pertanian Bogor (Indonesia). Bogor (Indonesia): PSE, 1999 (pt. 4 ) 29 p. 17 tables; 10 ref.

INDONESIA; LAND RESOURCES; WATER RESOURCES; AGRICULTURAL DEVELOPMENT; LAND MANAGEMENT; HORTICULTURE; CATCH CROPS.

0854 BUDISANTOSO, H. [Forest inheritance for descendant philosophical approach on forest management]. Pewarisan hutan untuk anak cucu tinjauan filosofis dalam pengelolaan hutan/Budisantoso, H. Eboni (Indonesia) ISSN 0853-9197 (1999) (no. 4) p. 42-49 8 ref.

FOREST MANAGEMENT; FOREST RESERVES; ENVIRONMENTAL PROTECTION; INDIGENOUS KNOWLEDGE.

0855 MAHARADATUNKAMAL. [Kinds of small mammalia and their natural role in Tanjung Puting National Park (Central Kalimantan, Indonesia)] Jenis-jenis hewan mamalia kecil dan peran alamiahnya di Taman Nasional Tanjung Puting/Maharadatunkamal (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 29-33 1 table; 12 ref.

CHIROPTERA; RODENTIA; MAMMALS; ANIMAL COLLECTIONS; NATIONAL PARKS; NATURAL REGENERATION; KALIMANTAN.

0856 MOGEA, J.P. [Palms in Bogani Nani Wartabone National Park, and its surrounding]. Flora palem di Taman Nasional Bogani Nani Wartabone dan sekitarnya/Mogea, J.P. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): Puslitbang Biologi, 1999 p. 34-46 2 tables; 15 ref. Appendix

PALMAE; FOREST INVENTORIES; HERBARIA; NATIONAL PARKS; SULAWESI.

0857 SUMEDI, N. [Lore lindu, a national park in equator circle. Lore lindu, taman nasional di gelang katulistiwa/Sumedi, M.; Rahardyan, N.A.. Eboni (Indonesia) ISSN 0853-9197 (1999) (no. 4) p. 60-67 Appendix

RURAL AREAS; NATIONAL PARK; ANIMAL RESOURCES; SULAWESI.

#### **P10 WATER RESOURCES AND MANAGEMENT / SUMBERDAYA AIR DAN PENGELOLAANNYA**

0858 BERD, I. [Empowerment of water resources and cropping patterns analysis: case study on Batang Selo irrigation system, West Sumatra (Indonesia)]. Pemberdayaan sumberdaya air dan analisis pola tanam: Studi kasus irigasi Batang Selo, Sumatera Barat/Berd, I.; Jaya, R. (Perhimpunan Teknik Pertanian Cabang Sumatera Barat (Indonesia)). [Proceedings of the National Seminar and Seventh Congress of Agricultural Technique Associations (PERTETA)]. Prosiding Seminar Nasional dan Kongres 7 Perhimpunan Teknik Pertanian (PERTETA). V. 4/Susanto, S.; Rahardjo, B.; Purwadi, T. (Eds.). Yogyakarta (Indonesia): UGM, 1999 p. 148-156 3 ill., 14 ref. Summary (In)

SUMATRA; WATER RESOURCES; CROP MANAGEMENT; IRRIGATION.

0859 FIRMANSYAH, I.U. [Soil water pumping technique for pump well management in bare/sleep land, Maros, South Sulawesi (Indonesia)]. Teknik pemompaan air tanah sebagai dasar pengelolaan sumur pompa di lahan tidur Kabupaten Maros, Sulawesi Selatan/Firmansyah, I.U. (Balai Penelitian Tanaman Jagung dan Serealia Lain, Maros (Indonesia); Prastowo, B.; Prabowo, A.. [Proceedings of the National Seminar and Seventh Congress of Agricultural Technique Associations (PERTETA)]. Prosiding Seminar Nasional dan Kongres 7 Perhimpunan Teknik Pertanian (PERTETA). V. 4/Susanto, S.; Rahardjo, B.; Purwadi, T. (Eds.). Yogyakarta (Indonesia): UGM, 1999 p. 157-176 6 ill., 5 tables; 11 ref. Summary (In)

SULAWESI; SOIL WATER; PUMPING; PUMPS; LAND CLASSIFICATION.

0860 MAWARDI, E. [Study of waters management and its effect on increasing peat soil productivity]. Kajian tata air dan pengaruhnya dalam meningkatkan produktifitas lahan gambut ombrogen/Mawardi, E.; Syafei (Balai Pengkajian Teknologi Pertanian Sukarami (Indonesia)). [Proceedings of the National Seminar and Seventh Congress of Agricultural Technique Association (PERTETA)]. Prosiding Seminar Nasional dan Kongres Perhimpunan Teknik Pertanian (PERTETA). V. 4/Susanto, S.; Rahardjo, B.; Purwaqdi, T. (Eds.). Yogyakarta (Indonesia): UGM, 1999 p. 177-196 3 ill., 4 tables; 8 ref. Summary (In)

SUMATRA; WATER MANAGEMENT; USES; PEAT SOILS; PRODUCTION INCREASE.

0861 PUSAT PENELITIAN TANAH DAN AGROKLIMAT. [Harvesting of rain and runoff waters for dryland development]. Memanfaatkan air hujan dan aliran permukaan untuk pengembangan lahan kering/Pusat Penelitian Tanah dan Agroklimat, Bogor (Indonesia). Warta Penelitian dan Pengembangan Pertanian (Indonesia) ISSN 0126-4427 (2000) v. 22(2) p. 12-14 2 ill., 2 tables

FRUIT CROPS; RAIN; RUNOFF WATER; HYDROLOGY; WATERSHEDS; INDONESIA.

SUMATRA; SOIL GENESIS; SOIL MORPHOLOGICAL FEATURES; GRANITE; SOIL DEFICIENCIES; SOIL CHEMICO-PHYSICAL PROPERTIES.

## P11 DRAINAGE / PENGAIRAN

0862 PRABOWO, A. [Utilization of lowland drainage channel as water supply for *Zea mays* after rice]. Manfaat saluran drainase lahan sawah dataran rendah sebagai pasok air tanaman jagung setelah padi/Prabowo, A.; Prastowo, B. (Balai Penelitian Tanaman Jagung dan Serealia Lain, Maros (Indonesia)). [Proceedings of the National Seminar and Seventh Congress (PERTETA) of Agricultural Technique Associations]. Prosiding Seminar Nasional dan Kongres 7 Perhimpunan Teknik Pertanian (PERTETA). V. 4/Susanto, S.; Rahardjo, B.; Purwadi, T. (Eds.). Yogyakarta (Indonesia): UGM, 1999 p. 136-147 3 tables; 7 ref. Summary (In)

ZEA MAYS; DRAINAGE; SOIL WATER CONTENT; RAINFED FARMING; LOW-LAND; ECONOMIC ANALYSIS.

## P32 SOIL CLASSIFICATION AND GENESIS / KLASIFIKASI DAN PEMBENTUKAN TANAH

0863 ARABIA, T. Pedogenesis and classification of red soils in Great Aceh region. Pedogenesis dan klasifikasi tanah-tanah merah di daerah Aceh Besar/Arabia, T. (Universitas Syiah Kuala Darussalam, Banda Aceh (Indonesia). Fakultas Pertanian). Jurnal Agrista (Indonesia) ISSN 1410-3389 (1999) v. 3(3) p. 165-174 7 tables; 12 ref. Summary (En)

SUMATRA; SOIL CLASSIFICATION; FERRALSOLS.

0864 WIHARSO, D. Development of soils derived on granitic rocks in South Lampung. Perkembangan tanah yang terbentuk dari batuan granit di daerah Lampung Selatan/Wiharso, D. (Universitas Lampung, Bandar Lampung (Indonesia). Fakultas Pertanian). Jurnal Tanah Tropika (Indonesia) ISSN 0852-257X (Jul-Dec 1999) v. 5(9) p. 117-125 1 ill., 5 tables; 11 ref. Summary (En)

## P33 SOIL CHEMISTRY AND PHYSICS / KIMIA DAN FISIKA TANAH

0865 ACHMAD, M. [Numerical computation of theory of heat conduction for waterflow analysis]. Penyelesaian numerik formula teori konduksi panas untuk analisis gerakan air tanah/Achmad, M.; Munir, A. (Universitas Hasanuddin, Ujung Pandang (Indonesia); Darmadi. [Proceedings of the National Seminar and Seventh Congress of Agricultural Technique Associations (PERTETA). Prosiding Seminar Nasional dan Kongres 7 Perhimpunan Teknik Pertanian (PERTETA). V. 4/Susanto, S.; Rahardjo, B.; Purwadi, T. (Eds.) . Yogyakarta (Indonesia): UGM, 1999 p. 239-246 7 ref. Summary (In)

INDONESIA; SOIL WATER; HEAT; STATISTICAL METHODS.

0866 ANDA, M. Chemical properties and variable charge changes of Ultisols and Oxisols as determined by pH values. Sifat kimia dan perubahan muatan variasi tanah Ultisols dan Oxisols berdasarkan nilai pH/Anda, M. (Pusat Penelitian Tanah dan Agroklimat, Bogor (Indonesia)). Jurnal Tanah Tropika (Indonesia) ISSN 0852-257X (Jul-Dec 1999) v. 5(9) p. 89-94 4 ill., 4 tables; 13 ref. Summary (En)

KALIMANTAN; ACRISOLS; SOIL CHEMICOPHYSICAL PROPERTIES; SOIL DEFICIENCIES; LAND PRODUCTIVITY; SOIL MORPHOLOGICAL FEATURES.

0867 DJAJADI. Changes in soil strength as affected by addition and removal of iron/oxide and addition of Aluminium oxide/Djajadi (Balai Penelitian Tanaman Tembakau dan Serat, Malang (Indonesia)). Agrivita (Indonesia) ISSN 0126-0537 (1999/2000) v. 21(2) p. 19-27 9 ill., 23 ref. Summary (En)

CROPS; SOIL STRENGTH; IRON; PRECIPITATION; ALUMINIUM; SOLVENT REMOVAL; PENETROMETERS.

0868 DJAJADI. Changes of soil strength as affected by addition and removal of calcium carbonate/Djajadi (Balai Penelitian Tanaman Tembakau dan Serat, Malang (Indonesia)). Agrivita (Indonesia) ISSN 0126-0537 (1999/2000) v. 21(2) p. 12-18 5 ill., 13 ref. Summary (En)

CROPS; SOIL STRENGTH; CALCIUM CARBONATE; SOLVENT REMOVAL; PENETROMETERS; SOIL STRUCTURE.

0869 HIKMATULLAH. Properties and classification of andisols developed from volcanic ash in the Tondano area, North Sulawesi/Hikmatullah; Subagyo, H.; Prasetyo, B.H. (Pusat Penelitian Tanah dan Agroklimat, Bogor (Indonesia)). Agrivita (Indonesia) ISSN 0126-0537 (1999/2000) v. 21(2) p. 28-40 4 ill., 6 tables; 31 ref. Summary (En)

SULAWESI; LAKES; ANDOSOLS; VOLCANIC SOILS; SOIL CHEMICO-PHYSICAL PROPERTIES; MINERAL CONTENT; SOIL CLASSIFICATION.

0870 LESTARI, P. [Intercropping of grasses and legumes to improve soil fertility of marginal land]. Paduan rumput dan legum untuk memperbaiki lahan kritis/Lestari, P. (Balai Penelitian Bioteknologi Tanaman Pangan, Bogor (Indonesia)). Warta Penelitian dan Pengembangan Pertanian (Indonesia) ISSN 0126-4427 (2000) v. 22(2) p. 3-5 2 ill.

GRASSES; LEGUMES; MARGINAL LAND; SOIL CONSERVATION; SOIL FERTILITY.

0871 PURNOMO, E. Spatial and temporal variability of some chemical compositions of tidal irrigation water in an acid sulfate soil of South Kalimantan/Purnomo, E. (Universitas Lambung Mangkurat Banjarbaru, Kalimantan (Indonesia). Fakultas Pertanian); Geling, S.M.; van Someren, W.T.G.. Jurnal Tanah Tropika (Indonesia) ISSN 0852-257X (Jul-Dec 1999) v. 5(9) p. 7-14 5 ill., 1 table; 2 ref. Summary (En)

IRRIGATED RICE; TIDES; SWAMPS; IRRIGATION WATER; CHEMICAL COMPOSITION; ACID SULPHATE SOILS; WATER QUALITY; KALIMANTAN.

0872 SALAM, A.K. The DTPA-extractable heavy metals in tropical soils treated with lime materials/Salam, A.K. (Institut Pertanian Bogor (Indonesia)); Djuniwati S.; Sarno; Sriyani, N.; Novpriansyah, H.; Septiana, A.; Putera, H.D. Indonesian Journal of Tropical Agriculture (Indonesia) ISSN 0852-5927 (1997) v. B(l) p. 6-12 5 ill., 3 tables; 31 ref. Summary (En)

TROPICAL SOILS; HEAVY METALS; MANGANESE; COPPER; ZINC; CADMIUM; LIMING MATERIALS; SOIL CHEMICO-PHYSICAL PROPERTIES.

0873 SAPEI, A. [Soil strength and compaction characteristics of latosol and podzols on water content change]. Sifat kepadatan dan kekuatan tanah latosol dan podsolk merah kuning pada perubahan kadar air/Sapei, A.; Sembiring, E.N.; Pramuhadi, G. (Institut Pertanian Bogor (Indonesia). Fakultas Teknologi Pertanian). [Proceedings of the National and Seventh Congress of Agricultural Technique Associations (PERTETA). Prosiding Seminar Nasional dan Kongres 7 Perhimpunan Teknik Pertanian (PERTETA). V. 4/Susanto, S.; Rahardjo, B.; Purwadi, T. (Eds.). Yogyakarta (Indonesia): UGM, 1999 p. 229-238 6 ill., 2 tables; 7 ref. Summary (In)

JAVA; SUMATRA; SOIL COMPACTION; SOIL STRENGTH; SOIL WATER CONTENT; FERRALSOLS; PODZOLS.

0874 SITORUS, S.R.P. Soil variability within land mapping units delineate by site analysis method. Keragaman tanah dalam satuan peta lahan hasil metode analisis lokasi/Sitorus, S.R.P. (Institut Pertanian Bogor (Indonesia). Fakultas Pertanian). Jurnal Tanah Tropika (Indonesia) ISSN 0852-257X (Jul-Dec 1999) v. 5(9) p. 63-75 3 ill., 5 tables; 16 ref. Summary (En)

CANADA; AGRICULTURE; SOIL TESTING; SOIL CLASSIFICATION; SOIL CHEMICO-PHYSICAL PROPERTIES; GEOMORPHOLOGY; CARTOGRAPHY; STATISTICAL METHODS.

0875 SUFARDI. Charge characterization and phosphate adsorption on ultisol acid mineral soil. Karakterisasi muatan dan adsorpsi fosfat pada tanah mineral masam ultisol/Sufardi

(Universitas Syiah Kuala Darussalam, Banda Aceh (Indonesia). Fakultas Pertanian). Jurnal Agrista (Indonesia) ISSN 1410-3389 (1999) v. 3(3) p. 175-184 3 ill., 1 table; 38 ref. Summary (En)

ACRISOLS; PHOSPHATES; ADSORPTION; SOIL CHEMICOPHYSICAL PROPERTIES.

0876 UTAMI, S.R. Na-Resin, a recommended methodology for clay dispersion of volcanic ash soils in Java, Indonesia/Utami, S.R. (Universitas Brawijaya, Malang (Indonesia). Fakultas Pertanian). Agrivita (Indonesia) ISSN 0126-0537 (1999/2000) v. 21(2) p. 41-52 1 ill., 7 tables; 11 ref. Summary (En)

JAVA; VOLCANIC SOILS; SODIUM; PHYTIC ACID; SOIL CHEMICOPHYSICAL PROPERTIES; DISPERSANTS; APPLICATION METHODS; INDONESIA.

0877 WIHARSO, D. The characteristic of soil derived from tertiary acid mand sedimentary rocks under humid tropical conditions (case study of Gedong Aji Area, North Lampung). Karakteristik tanah yang terbentuk dari bahan induk sedimen masam tersier pada kondisi tropika basah (studi kasus daerah Gedong Aji, Lampung Utara)/Wiharso, D. (Universitas Lampung, Bandar Lampung (Indonesia). Fakultas Pertanian); Yuwono, S.B. Jurnal Tanah Tropika (Indonesia) ISSN 0852-257X (Jul-Dec 1999) v. 5(9) p. 57-62 2 tables; 8 ref. Summary (En)

SUMATRA; SOIL CHEMICOPHYSICAL PROPERTIES; SEDIMENT; SOIL PROFILES; SOIL CLASSIFICATION; SLOPING LAND; HUMID TROPICS.

#### P34 SOIL BIOLOGY / BIOLOGI TANAH

0878 IMAMUDDIN, H. [Cultivation of nitrification bacteria from activated sludge]. Kultivasi bakteri nitrifikasi dari lumpur aktif/ Imamuddin, H.; Agustiyani, D. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/ Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 297-303 5 tables; 9 ref.

Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 290-296 5 tables; 13 ref.

BACTERIA; NITRIFICATION; INOCULATION; GROWING MEDIA; AMMONIUM; NITRITES; NITRATES; ACTIVATED SLUDGE.

0879 YUSNAINI, S. The effect of vesicular arbuscular mycorrhizae inoculation on the yield of corn treated with temporary water stress during vegetative and generative phases. Pengaruh inokulasi mikoriza vesikular arbuskular terhadap produksi jagung yang mengalami kekeringan sesaat pada fase vegetatif dan generatif/Yusnaini, S.; Niswati, A.; Nugroho, S.G.; Muludi, K.; Irawati, A. (Universitas Lampung, Bandar Lampung (Indonesia). Fakultas Pertanian). Jurnal Tanah Tropika (Indonesia) ISSN 0852-257X (Jul-Dec 1999) v. 5(9) p. 1-6 5 tables; 10 ref. Summary (En)

ZEA MAYS; DROUGHT STRESS; VESICULAR ARBUSCULAR MYCORRHIZAE; VEGETATIVE PERIOD; INOCULATION; ROOTS; SOIL CHEMICO-PHYSICAL PROPERTIES; YIELDS; SOIL WATER CONTENT.

#### P35 SOIL FERTILITY / KESUBURAN TANAH

0880 SULISTINAH, N. [Bioconversion of benzonitrile by several microbes]. Biokonversi benzonitrit oleh beberapa mikroba/Sulistinah, N. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/ Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 297-303 5 tables; 9 ref.

MICROORGANISMS; SELECTION; INDUSTRIAL WASTES; BACTERIA; GROWING MEDIA; DEGRADATION; BIOCONVERSION; GROWTH.

**P40 METEOROLOGY AND CLIMATOLOGY / CUACA DAN IKLIM**

0881 DARMADI. [Applicability of inputting model for lost rain data]. Keberlakuan model pengisian data hujan hilang/Darmadi (Universitas Gadjah Mada, Yogyakarta (Indonesia). Fakultas Teknologi Pertanian). [Proceedings of the National Seminar and Seventh Congress (PERTETA) of Agricultural Technique Associations]. Prosiding Seminar Nasional dan Kongres 7 Perhimpunan Teknik Pertanian (PERTETA). V. 4/Susanto, S.; Rahardjo, B.; Purwadi, T. (Eds.). Yogyakarta: UGM, 1999 p. 46-58 20 tables; 9 ref. Summary (In)

JAVA; RAIN; DATA COLLECTION.

0882 SUDIRA, P. [Rainfall station classification using cluster technique]. Klasifikasi stasiun hujan menggunakan teknik kluster/ Sudira, P.; Sudyastuti, T. (Universitas Gadjah Mada, Yogyakarta (Indonesia). Fakultas Teknologi Pertanian); Kumaladewi, D.N. [Proceedings of the National Seminar and Seventh Congress (PERTETA) of Agricultural Technique Associations]. Prosiding Seminar Nasional dan Kongres 7 Perhimpunan Teknik Pertanian (PERTETA). V. 4/Susanto, S.; Rahardjo, B.; Purwadi, T. (Eds.). Yogyakarta: UGM, 1999 p. 29-45 9 tables; 11 ref. Summary (In). Appendices

INDONESIA; RAIN; CLASSIFICATION.

0883 SUDYASTUTI, T. [Micro climate temperature in single type glass house]. Panas iklim mikro di dalam rumah kaca tipe tunggal/ Sudyastuti, T. (Universitas Gadjah Mada, Yogyakarta (Indonesia). Fakultas Teknologi Pertanian). [Proceedings of the National Seminar and Seventh Congress of Agricultural Technique Associations]. Prosiding Seminar Nasional dan Kongres 7 Perhimpunan Teknik Pertanian (PERTETA). V. 4/Susanto, S.; Rahardjo, B.; Purwadi, T. (Eds.). Yogyakarta (Indonesia): UGM, 1999 p. 10-28 6 tables; 17 ref. Summary (En)

SWIETENIA MACROPHYLLA; CLIMATE; TEMPERATURE; GREENHOUSES; VENTILATION.

**Q02 FOOD PROCESSING AND PRESERVATION / PENGOLAHAN DAN PENGAWETAN MAKANAN**

0884 BAMBANG, K. [Processing of high catechin tea]. Pengolahan teh bercatekin tinggi/Bambang, K. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Ekspos Teknologi Perkebunan: Buku 2: Peningkatan Produktivitas dan Efisiensi Industri Perkebunan/Dradjat, B.; Supriadi, M.; Gunawan, A.; Fadjar, U.; Nancy, C. (Eds.). Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia). Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 224-230 3 ill., 4 tables; 3 ref.

TEA; CATECHIN; PROCESSING; CHEMICOPHYSICAL PROPERTIES.

0885 SRI-MULATO. [Research results of processing to support the rural agroindustry based on coffeea and cacao]. Hasil penelitian pengolahan untuk mendukung agroindustri pedesaan berbasis kopi dan kakao/Sri-Mulato; Atmawinata, O. (Pusat Penelitian Kopi dan Kakao, Jember (Indonesia). [Proceedings of Workshop on Agricultural Partnership and Expose of Current Technology Resulted from Estate Research]. Lokakarya Kemitraan Pertanian dan Ekspos Teknologi Mutakhir Hasil Penelitian Perkebunan/Balai Pengkajian Teknologi Pertanian, Ungaran (Indonesia). Ungaran (Indonesia): BPTP, 1998 (pt. 9) 30 p. 10 ref.

COFFEA; THEOBROMA CACAO; FOOD PROCESSING; EQUIPMENT; AGRO-INDUSTRIAL SECTOR; BYPRODUCTS.

0886 WIDOWATI, S. Substitution of soybean by lupin in tofu making. Substitusi lupin (*Lupinus luteus*) terhadap kedelai (*Glycine max*) dalam pembuatan kembang tahu/ Widowati, S. (Balai Penelitian Biologi, Bogor (Indonesia)); Dayani; Santosa, B.A.S. Agritech (Indonesia) ISSN 0216-0455 (1998) v. 19(2) p. 74-77 1 ill., 3 tables; 8 ref. Summary (En)

LUPINUS LUTEUS; SOYBEANS; SOY-FOODS; PROCESSED FOODS; CHEMICAL COMPOSITION.

**Q03 FOOD CONTAMINATION AND TOXICOLOGY / KONTAMINASI DAN TOKSIKOLOGI PANGAN**

0887 PURWATI, E. Prevalence of Listeria species isolated from beef in Malaysia/Purwati, E. Jurnal Peternakan dan Lingkungan (Indonesia) ISSN 0852-4092 (1999) v. 5(03) p. 14-17 1 ill., 3 tables; 3 ref. Summary (In)

BEEF; FOODBORNE DISEASES; LISTERIA MONOCYTOGENES; ISOLATION TECHNIQUES; IDENTIFICATION; MALAYSIA.

0888 RAHARJO, S. Decontamination technique for meat and carcass. Teknik dekontaminasi cemaran bakteri pada karkas dan daging/Raharjo, S. (Universitas Gadjah Mada, Yogyakarta (Indonesia). Fakultas Teknologi Pertanian). Agritech (Indonesia) ISSN 0216-0455 (1998) v. 19(2) p. 47-54 Bibliography (p. 52-54). Summary (En)

MEAT; CARCASSES; DETOXIFICATION; CONTAMINATION; MICROORGANISMS.

**Q04 FOOD COMPOSITION / KOMPOSISI MAKANAN**

0889 HADIWIYOTO, S. The change of protein solubility, available lysine, metionine, and histidine contents of "Bandeng Presto" during storage and re-cooking. Perubahan kelarutan protein, kandungan lisin (available), metionin, dan histidin bandeng presto selama penyimpanan dan pemasakan ulang/Hadiwiyoto, S. (Universitas Gadjah Mada, Yogyakarta (Indonesia). Fakultas Teknologi Pertanian); Naruki, S.; Satyanti, S.; Rahayu, H.; Riptakasari, D.. Agritech (Indonesia) ISSN 0216-0455 (1998) v. 19(2) p. 78-82 6 ill., 1 table; 22 ref. Summary (En)

MILKFISH; PROCESSED PRODUCTS; PROTEINS; METHIONINE; HISTIDINE; PRESSURE; STEAMING; STORAGE; HISTIDINE.

0890 RAHAYU, R.D. [Isolation and characterization of "Orange" pigment from *Neurospora sitophylla* No. 702]. Isolasi dan karakterisasi pigmen "Oranye" dari jamur

oncom *Neurospora sitophylla* No. 702/Rahayu, R.D. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/ Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 304-314 5 ill., 2 tables; 5 ref.

NEUROSPORA; MYCELIUM; GROWING MEDIA; PIGMENTS; ISOLATION.

**Q60 PROCESSING OF NON-FOOD OR NON-FEED AGRICULTURAL PRODUCTS / PENGOLAHAN HASIL PERTANIAN NON-PANGAN DAN NON-PAKAN**

0891 ALAM, A. [Improvement of raw rubber cleanliness with rotation system cleaner machine]. Peningkatan kebersihan bokar karet remah dengan mesin pembersih bokar sistem rotasi/Alam, A.; Honggokusumo, S.; Mudji S., A.; Syamsu, Y.; Handoko, B.. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Ekspos Teknologi Perkebunan: Buku 2: Peningkatan Produktivitas dan Efisiensi Industri Perkebunan/Dradjat, B.; Supriadi, M.; Gunawan, A.; Fadjar, U.; Nancy, C. (Eds.) Asosiasi Penelitian Perkebunan Indonesia, Bogor (Indonesia). Bogor (Indonesia): Asosiasi Penelitian Perkebunan Indonesia, 1999 p. 63-66 1 ill., 1 table; 6 ref.

RUBBER; EQUIPMENT; EQUIPMENT PERFORMANCE; QUALITY.

0892 HANDOKO, B. [Technology engineering of crumb latex using for rubber band industry on farm scale]. Rekayasa teknologi pemanfaatan lateks dadih untuk industri gelang karet pada skala usaha tani/Handoko, B.; Honggokusumo, S.; Alam, A.; Sinurat, M.; Priyambodo, A.; Arizal, R. [Proceeding of Workshop and Expose of Plantation Technology: Book 2: Increasing Productivity and Efficiency of Plantation Industry]. Prosiding Lokakarya dan Ekspos Teknologi Perkebunan: Buku 2: Peningkatan Produktivitas dan Efisiensi Industri Per-

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LATEX; PROCESSING.

0293 VEGA, J.R.L. Production of urea super granules status report/Vega. J.R.L.; Sumarta, E.; Moersidi, S. [Proceedings of National Workshop of Fertilizers Efficiency]. Prosiding Lokakarya Nasional Efisiensi Pupuk/Sudjadi, M.; Adiningsih, J.S.; Santoso, D.; Kurnia, U.; Mulyani, A.; Rochayati, S. (Eds.) Pusat Penelitian Tanah dan Agroklimat, Bogor (Indonesia). Bogor (Indonesia): PUSLIT-TANAK, 1996 p. 61-86 2 ill., 6 tables; 14 ref.

UREA; BRIQUETTES; PROCESSING; PRODUCTION; ECONOMIC ANALYSIS; NITROGEN FERTILIZERS.

#### **Q70 PROCESSING OF AGRICULTURAL WASTES / PENGOLAHAN LIMBAH PERTANIAN**

0894 AGUSTIYANI, D. [Nitrification process in management of effluent of palm oil industry using immobilized fluidized bioreactor with polyurethan particle media]. Proses nitrifikasi pada pengolahan air buangan industri minyak kelapa sawit secara biologis dengan sistem pertumbuhan terlekat/Agustiyani, D.; Imamuddin, H. (Pusat Penelitian dan Pengembangan Biologi-LIPI, Bogor (Indonesia)). [Technical Report of Research Development and Utilization Project on Terrestrial Biota During 1998/1999]. Laporan Teknik Proyek Penelitian, Pengembangan dan Pendayagunaan Biota Darat/Partomihardjo, T. [et al.] (Eds.) Pusat Penelitian dan Pengembangan Biologi, Bogor (Indonesia). Bogor (Indonesia): PUSLITBANG BIOLOGI, 1999 p. 283-289 2 ill., 2 tables; 9 ref.

OIL PALMS; INDUSTRIAL WASTES; WASTEWATER; NITRITES; NITRIFICATION.

0895 GURITNO, P. [Oil palm stems as raw material is pulp and paper production]. Pembuatan pulp dan kertas berbahan buku

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OIL PALMS; AGRICULTURAL WASTES; PROCESSING; PULP; PAPER.

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OIL PALMS; WASTE UTILIZATION; COMPOSTS; COMPOSTING; CHEMICAL COMPOSITION.

#### **Q80 PACKAGING / PENGEPAKAN PRODUK INDUSTRI HASIL PERTANIAN, PETERNAKAN, PERIKANAN DAN KEHUTANAN**

0897 SUPRIHATINI, R. [Analysis of competitive advantage of Indonesian cannning pineapple]. Analisis daya saing nenas kaleng Indonesia/Suprihatini, R. (Asosiasi Penelitian Perkebunan, Bogor (Indonesia)). Jurnal Agro Ekonomi (Indonesia) ISSN 0216-9053 (1998) v. 17(2) p. 22-37 4 tables; 10 ref. Summaries (En, In)

PINEAPPLES; CANNING; ECONOMIC COMPETITION; INDONESIA.

**S30 DIET AND DIET RELATED DISEASES / DIIT DAN PENYAKIT YANG BERHUBUNGAN DENGAN DIIT**

0898 TRIWITONO, P. Dietary fiber characteristics of "Gudeg Kering". Sifat dan potensi serat pangan pada "Gudeg-Kering"/ Triwitono, P.; Suparmo; Noor, Z. Agritech (Indonesia) ISSN 0216-0455 (1998) v. 19(2) p. 83-85 1 table; 11 ref. Summary (En)

ARTOCARPUS HETEROPHYLLUS;  
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CHEMICOPHYSICAL PROPERTIES;  
PHYSIOLOGICAL FUNCTIONS.

**U10 MATHEMATICAL AND STATISTICAL METHODS / METODOLOGI MATEMATIKA DAN STATISTIKA**

0899 DARMADI. [Application of differential method for rivebasin management]. Penerapan metode hingga untuk penyelesaian aliran sungai satu dimensi/Darmadi (Universitas Gadjah Mada, Yogyakarta (Indonesia). Fakultas Teknologi Pertanian). [Proceedings of the National Seminar and Seventh Congress of

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JAVA; WATERSHEDS; STATISTICAL METHODS.

**U40 SURVEYING METHODS / METODA SURVEI**

0900 ZULFIKAR. Remote sensing and geographic information system (GIS) application to identify critical land. Aplikasi penginderaan jauh dan sistem informasi geografi (SIG) untuk mengidentifikasi lahan kritis/Zulfikar (Universitas Syiah Kuala Darussalam, Banda Aceh (Indonesia). Fakultas Pertanian); Mulyanto, B.; Kurnia, U. Jurnal Agrista (Indonesia) ISSN 1410-3389 (1999) v. 3(3) p. 209-220 4 tables; 9 ref. Summary (En)

MARGINAL LAND; REMOTE SENSING;  
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