

Vol. 6 No. 1 (1996) (1996.10.25)

口絵

谷山一郎：中国内モンゴル自治区奈曼旗の土地荒廃

原著論文

真木太一・杜 明遠・藩 伯榮・鮫島良次：中国新疆トルファンの沙漠とオアシスにおける気候特性: Arid land, Climatic characteristic, Desert, Oasis, Wind...1-14

金 凰鶴・西崎 泰・尹 懐寧・白 鴻祥・鄭 応順・山口達明：砂質土壤におけるピートの施用が土壤の理化学性および植物の生長に及ぼす効果 - ハクサイのポット栽培実験の統計的解析 - : Sandy soil, Peat, Physical and chemical properties, Weathered coal, Pot cultivation, Chinese cabbage, Statistical analysis...15-23

篠田 裕・西崎 泰・野頬成嘉・山口達明・王 周 塚・蒋 進・馬 劍：中国新疆における草炭を用いる沙漠緑化の基礎的実験 - 草炭の保水効果とチングンサイのポット栽培試験 - : Peat, Gurbantunggut desert, Desert reclamation, Sandy soil moisture measurement, Pot cultivation...25-33

Takashi ISHIYAMA, Yasuhiro NAKAJIMA, Koji KAJIWARA: Vegetation Index Algorithm for Vegetation Monitoring in Arid and Semi Arid Land: Remote sensing, Vegetation index, NDVI, Vegetation cover, Satellite data...35-47

青木輝夫・青木忠生・深堀正志・廣田道夫・張 希明：中国タクラマカン沙漠における大気中の水蒸気及びメタンの遠隔測定 : Taklimakan desert, Water vapor, Methane, Remote sounding, TERSE ...49-58

小特集

沙漠工学研究分科会：特集 第 6 回沙漠工学講演会講演要旨集... 59-60

榎 啓二・山田興一：乾燥地における生物的 CO₂ 固定法の位置づけ ...61-64

尾崎益雄：乾燥地における排水処理と処理水再利用...65-68

清水 浩：砂漠の交通機関としての電気自動車の可能性...69-73

資料

山川修治：気候変化影響研究部会研究会における沙漠・砂漠化関連事柄について...75-78

谷山一郎：第 9 回国際土壤保全会議に出席して...79-83

書評

長濱 直：真木太一著「中国の砂漠化・綠化と食糧危機」...85

山川修治：篠田雅人著「神々の大地 アフリカ」...86

Vol. 6 No. 2 (1997) (1997.2.25)

口絵

坂田俊文：シルクロードに沿うホレズム及びトルファン付近の衛星画像

展望論文

Roy A. STACY, Serge SNRECH: Desertification Control and Risk Management in a Changing Agriculture -The Case of the Sahel-: Sahel, Structural change, Desertification, Risk management, Partnership...87-103

篠田雅人：砂漠化の気候に対する影響：概説 : Drought, Desertification, Arid region, Sahel...105-114

原著論文

大塚義之・井伊博行・榎 原 晋：カラム実験での塩分集積過程の解析 : Evaporation, Salt accumulation, Migration analysis...115-120

Muhtar QONG・高村弘毅：タクリマカン沙漠南縁地域における Tamarix 砂丘の形成 : Tamarix cones, Taklimakan desert, Sand layers, Litter layers, Formative units...121-130

小特集 I：乾燥地農業 - 現代との相剋

松本 聰：小特集 I：「乾燥地農業 - 現代との相剋」を企画するに当たって : Conflict, Current agriculture, Desertification control, Dry farming, Traditional agriculture...131-132

松本 聰：土壤からみたドライファーミングの思想と現代農業 : Dry farming, Traditional agriculture, Current agriculture, Soil salinization, Sustainable agriculture...133-139

勝俣 誠：サヘル地域における沙漠化防止対策と農村開発 - サヘル性の方法論的試論 - : Desertification, Sahel, Rural development, Africa, Participation...141-147

赤澤 威：採集から農耕へ，西アジアにおける歴史 : Agriculture, Hunting-fishing-gathering, Broad spectrum, West Asia...149-157

小特集 II：衛星データ・考古学・文献からみた沙漠の遺跡と環境 - トルファン付近とホレズム付近を中心として -

相馬秀廣：小特集 II：「衛星データ・考古学・文献からみた沙漠の遺跡と環境 - トルファン付近とホレズム付近を中心として - 」に寄せて : Space archaeology, Satellite data, Turpan basin, Khorezm, Interdisciplinary science, Environment...159-161

石田紀郎・川端良子・辻村茂男・中原紘之：アラル海流域の灌漑農業と環境問題 : Aral sea, Large-scale irrigation, Desertification, Environment...163-170

林 俊雄：ホレズムの遺跡 : Khorezm, Archaeology, Oasis agriculture, Nomadism, Conservation...171-181

坂田俊文：ウズベキスタン・ホレズム地区の人工衛星による調査 : Space archaeology, Satellite, Environment, Ancient city, Ruin... 183-186

李 軍：タリム盆地の古代遺跡 : Tarim basin, Taklimakan desert, Silk road, Ruins...187-192

吉野正敏・劉 永誌：トルファン盆地の気候 - 過去と現在 - : Climate, Paleoclimate, Turpan basin, Oasis, Heat island...193-202

堀 直：文献資料からみたトルファン付近 : Turpan, Che-shi, Nomadic powers, Silk-road, Tian-shan...203-207

相馬秀廣・坂田俊文・田中好雄・中野良志・森井 真：衛星画像からみたトルファン付近 : Turpan basin, Satellite images, Fire mountains, Yarhoto, Piedmont oases...209-217

Vol. 7 No. 1 (1997) (1997.8.25)

口絵

宮崎忠国 : タール沙漠の衛星画像と人間活動による沙漠化/土壤荒廃
原著論文

A.S. RAO, T. MIYAZAKI: Climatic Changes and Other Causative Factors Influencing Desertification in Osian (Jodhpur) Region of the Indian Arid Zone: Climatic changes, Indian arid region, Desertification... 1-11

劉 永誌・吉野正敏 : 中国新疆タクラマカン砂漠のオアシスにおける
経済発展と土地荒廃 : Economic development, Land degradation, Taklimakan desert, Oasis, Arid land agriculture... 13-22

Yuuki YAZAWA, Yutaka SHINODA, Fumihiko YAZAKI, Tatsuaki YAMAGUCHI: Controlling Permeability and Salinity in Sandy Soils with Ammonium Humate: Ammonium humate, Cation exchange, Permeability, Leaching, Sandy soil... 23-33

Tatsuaki YAMAGUCHI, Yasushi NISHIZAKI, Toyohiko HAYAKAWA, Mamoudou RIAD, Michael IBRAHIM, Nabil FANOUS, Nikolai BAMBALOV, Guennadi SOKOLOV: Arid Land Reclamation with Natural Organic Materials -Effect of Peat-Sapropel Based Ameliorant on Green Cabbage and Wheat Cultivation in the Egyptian Western Desert: Egyptian desert, Sandy soils, Field experiment, Green cabbage, Wheat, Natural organic materials... 35-45

西上泰子 : 沙漠開発の視点からみた世界の沙漠面積 : Desert area, Precipitation, Shoreline, Solar energy, Desert development... 47-52

Akihiko OKADA, Sadayo YABUKI, Cong-Qiang LIU, Akira UEDA, Zi-Li FAN, Qing CHANG: Salt Efflorescent Materials in Saline Lands of Xinjiang, China: Evaporite, Desert, Xinjiang... 53-67

小特集

沙漠工学研究分科会 : 小特集 第7回沙漠工学講演会講演要旨集... 69-70

高橋 悟 : ジプチにおける砂漠緑化 Water harvesting による実践 ... 71-76

安部征雄・小島紀徳・山田興一 : 二酸化炭素対策としての乾燥地域における大規模植林... 77-81

書評

赤木祥彦 : 原 隆一著「イランの水と社会」... 83

Vol. 7 No. 2 (1997) (1997.12.25)

口絵

長島秀樹・岡田菊夫・竹見哲也 : 中国内陸部のダストストーム

特集 : アジア内陸起源の風送ダスト

長島秀樹・岡田昭彦・矢吹貞代・三上正男 : 「特集:アジア内陸起源の風送ダスト」編集にあたって... 85-86

特集原著論文

竹見哲也 : 1993年5月5日の中国北西部に発生したダストストームとその発生環境 : Black storm, Squall line, Moisture flux, Gobi desert... 87-96

三上正男 : タ克拉マカン砂漠南縁で発生したダストストーム : Dust storm, Taklimakan desert, Tarim basin, Topographical effect, Downslope wind... 97-106

甲斐憲次・高杉年且・中村 一 : タ克拉マカン沙漠を起源とする黄砂の長距離輸送について: Asian duststorm (Kosa), Taklimakan desert, Lidar, Long range transport... 107-117

大日方 裕・柳澤文孝・小谷 卓・上田 晃 : 山形県鶴岡市と山形市の乾性降下物に含まれている非海塩性硫酸イオンのイオウ同位体比 : Aerosol, Sulfur isotope, Dry deposition, Kosa, Non-sea-salt sulfate... 119-126

Sadayo YABUKI, Akihiko OKADA, Akira UEDA, Qing CHANG, Zi-Li FAN: Sulfur Isotope Study of Salt Materials in Saline Lands and Salt Deposits around the Desert Areas in Xinjiang, China -Implications to the Study of the Source of the Aeolian Dust of Inland Asia-: Sulfur isotope ratio, Evaporite, Desert, Aeolian dust, Xinjiang... 127-138

Masatoshi HONDA, Hiroshi SHIMIZU: Study of Transport Mechanism of Aeolian Sediments from the Taklimakan Desert -Implication of Grain-Size Distribution and Major-Element Composition: Taklimakan desert, Aeolian sediment, Grain size distribution, Major-element composition, Transport mechanism... 139-146

権 成頼・岩坂泰信・松永捷司・柴田 隆 : 黄砂エアロゾルの長距離輸送 - 1994年春期のライダー観測を中心に - : Kosa aerosol particle, Lidar measurement, Free troposphere, Long range transport, Discriminant analysis, Chemical transfer... 147-155

Yasunobu IWASAKA, Masaharu HAYASHI, Ikuko MORI, Sun An KWON, Katsuji MATSUNAGA, Guang Yu SHI, Jun ZHOU, Takashi SHIBATA, Masataka NISHIKAWA, Yasuhiko OKUHARA, Keiichiro HARA, Masahiro NAGATANI, Masaharu WATANABE, Yoon Sin KIM, Zhi Ben GONH: Aerosol Particles in the Asian Continental Atmosphere -Balloon-borne, Aircraft-borne, and Lidar Measurements in Japan and China-: Aerosol particle, Asian continental atmosphere, Balloon-borne measurement... 157-167

特集短報

安井元昭・水谷耕平・板部敏和・高部政雄・周 紀俠・凌 裕泉・劉 立超 : 中国蘭州における対流圏エアロゾルのライダー観測: Lidar, Aerosol, China, Dust, Observation... 169-173

特集展望論文

井伊博行・平田健正 : 黄土高原の土壤浸食とダスト中の窒素化合物について : Loess, Nitrogen isotope, Dust, Soil erosion... 175-180

特集資料

矢吹貞代・岡田昭彦 : 中国 新疆ウイグル自治区の地名表記... 181-184

原著論文

Wenhong MO, Toshiki NATORI, Shu JIANG, Noboru NISHIMURA, Kenji OMASA: Responses of Photosynthesis and Water Use to Drought in Two Desert Annuals, *Agriophyllum squarrosum* and *Bassia dasypylla*: *Agriophyllum squarrosum*, *Bassia dasypylla*, Leaf water potential, Photosynthesis, Soil moisture... 185-195

鷹木恵子 : チュニジアのナツメヤシ民族文化 - ジェリード地方のオアシスの事例 - : Date palm, Folk culture, Utilization of palm tree, Symbolism, Changes... 197-214

Vol. 7 S (1998) (1998.3.31)

Special issue: Proceedings of Desert Technology IV

an Engineering foundation Conference

Articles with full paper review

The World's Arid Areas - Global and Regional Assessment of the Past, Present and Future

V.R. SQUIRES: The World's Drylands and Global Change in the Twenty-first Century: Challenges and Prospects: Carbon sequestration, Economic growth, Population, Technology... 1-13

W.T. HARTWELL: Lithic Resource Depletion by Early Prehistoric Populations in the Desert West of North America: Depletion, Lithic resources, Obsidian hydration, Recycling... 15-18

C.M. BECK: Arid North Coast of Peru: Survival Strategies of Ancient Civilizations: Archaeology, Peru... 19-22

G. BASTIN, V. CHEWINGS: Monitoring Grazing Impact with Satellite Data: Grazing gradient, Land degradation, Monitoring, Satellite data, Videography... 23-26

R. SMITH, C. McMILLAN, R. CRAIG, J. ADAMS, M. STEBER: Satellite Monitoring of Bush Fires in Western Australia: Bush fires, Monitoring, NOAA-AVHRR... 27-30

S. KUMAR: Effect of the Great Indian Desert on Acidic Deposition -The Changing Pattern-: Acidic deposition, Ecosystem, Thar desert... 31-34.

H. PRINGLE: Environmental Auditing Beyond 'Range Condition' -A Western Australian Perspective-: Ecological hierarchy, Range condition, Values... 35-38

K. LEIGHTON, S.V. VREESWYK: Sustainable Pastoral Land Use in an Arid Climate -A Shiny, New Toolbox!-: Management, Rangelands, Pastoralism... 39-42

- K. PAHARI, S. MURAI: Global Water Erosion Modeling Using Remote Sensing and GIS: DEM, GIS, Remote sensing, Soil erosion...43-46
- S. TAKAHASHI, F. WATANABE, T.M. ISMAEL, K. SAKURADA: The Characteristics of Rainfall in the Republic of Djibouti: Area rainfall, Desert greening, Irrigation, Mean elevation method, Sustainable agriculture...47-50
- W. SHEN, G DONG, S. LI: Desertification and its Developing Trend on the Tibetan Plateau, China: Land desertification, Tibetan plateau...51-53
- R. ADILLA, A. KURBAN, A. IBRAHIM: The Reasons of Land Desertification and Its Prevention and Control Ways: Amelioration, Desertification, Prevention...55-57
- L. KAPUSTINA: Assessment and Mapping of the Desertification: Degrading vegetation, Desert, Desertification, Wind erosion...59-61
- K.T. TURSUNOV: On the Regional Problem of Desertification in Central Asia: Convention, Degradation, Desertification, Ecosystem, Strategy ...63-66
- New Technologies for Sustainable Production in Arid Areas**
- G.A. ROBERTSON: New Technologies for Sustainable Production in Arid Areas...67-76
- P. COMMANDER: Groundwater from Australian Deserts: Desert, Fossil groundwater, Groundwater, Sedimentary basins...77-80
- S. SINHA, N. KUMAR, A. GHOSH, S. KUMAR: Desert-Inland-Marine Solartopia: Afforestation, Desert irrigation, Solar still...81-84
- T. YAMAGUCHI, M. YOKOTA, Y. ABE, S. YOKOTA: Performance Analysis of Basin-type Solar Stills Equipped with Evaporation and Condensation Stimulators: Basin-solar still, Covering materials, Evaporation stimulator...85-88
- M. ANDA, G HO, K. MATHEW: Wastewater Reuse for Revegetation and Permaculture in Arid Lands: Food production, Greywater reuse, Revegetation...89-92
- M. OZAKI, Y. ABE, H. KOKUBU, T. UMETSU, S. TAKAHASHI: Feasibility Study for Recycling Use of Waste Water in Arid and Semi-Arid Lands: Arid land, Recycling use, Waste water treatment, Water sources ...93-96
- Y. HU: A Study of Vegetable Growing Technology in the Taklimakan Desert: Saline water, Taklimakan desert, Vegetable growing...97-99
- S. APPLEBAUM: Desert Aquaculture -A New Opportunity for World Aquaculture Production:- Aquaculture, Desert, Food production... 101-103
- J.A. YOUNG, F. TIPTOM: Range Livestock in the Great Basin of North America: Range, Restoration ecology...105-108
- R.A. GILL, J.A. BHATTI: Sustainable Ruminants Production System under Stress Lands in Pakistan: Acceptability, *Atriplex amnicola*, Palatability, Replacement, Saline sodic soils...109-112
- D.M. ANDERSON: Pro-active Livestock Management -Capitalizing on Animal Behavior:- Canine predation, Flerds, Livestock behavior... 113-116
- K. TAHARA, T. KOJIMA, A. INABA: Water Management for Sustainable Forest Systems in Arid Land -CO₂ Reduction and Solar Energy Utilisation:- CO₂, Forest, Precipitation...117-120
- S. KOMIYAMA, K. MATSUYAMA, N. MIYAHARA, K. MURASE: Development of a Roof Type Solar Membrane Distillator for Desert Afforestation: Desert afforestation, Membrane distillator, PTFE membrane ... 121-124
- D. HARRISON, G HO: Solar Powered Reverse Osmosis Desalination: Brackish water, Desalination, Remote area, Reverse osmosis, Solar power...125-128
- T. GAWTHORNE, K. MATHEW, R. GIBBS, J. PILLAI, G.E. HO, M. ANDA: Bacteriological Water Testing in Remote Localities: Bacteriological, Remote localities, Water testing...129-132
- S. YANASHI, A. HAMACHER, J. LIU, Y. ABE, S. TAKAHASHI: Studies on the Changes of Soil Physical Properties by Adding Water Holding Polymers: Compaction of soil, Permeability, pF-moisture, Polymer... 133-136
- K.N. TODERICH, K. IDZIKOWSKA, H.R.HALILOV: Hardness of Seeds and Germination Dynamics of Fabaceae Arid Species: Acid sulfuric, Embryo, Fabaceae, Hardness, Palisade tissue, Seeds, Seed coat... 137-140
- S. MATSUDA, T. SANO, Y. OKANO: Numerical Simulation of Ascending Current for Artificial Rainfall: Artificial rainfall, Ascending current, Numerical simulation, Thermal convection...141-144
- X. XU, J. JIANG: The Utilization of Salt Water by Solar Distiller in Taklimakan Desert: Salt water, Solar distiller, Taklimakan desert... 145-147
- Q. GAO, H. DU, J. MA: Water Resources and Their Sustainable Utilization in Arid Northwestern China: Arid NW China, Sustainable utilization, Water resources...149-152
- A. ABDULLAEV, B. KAMALOV, V. DEEVA: Prospects of Halotolerant Microalgae Photobiotechnology in Uzbekistan Desert Zones: Biochemical composition, Dunaliella, Method, Microalgae, Optimization, Productivity...153-156
- A.A. ABDULLAEV, V.P. KJJAT: Growing Cotton in the Uzbekistan Arid Zone: Adaptation, Anatomy, Cotton species, Morphlogy...157-160
- M. AKRAM, B.A. CHANDIO: Conjunctive Use of Rainwater and Saline Groundwater for Desertification Control in Pakistan through Agro -forestry and Range Management: Conjunctive, Desertification, Vegetation, Water harvesting...161-164
- A. GHAFOOR, M. QADIR, G MURTAZA, H.R. AHMAD: Strategies to Harvest Sustainable Rice and Wheat Yields Using Brackish Water for Irrigation: Chemical and physical soil properties, Drainage water, Economics, Rice, Wheat...165-169
- M. LATIF, S. MAHMood, S. MAHMood: Application of Salt Prediction Models in Irrigated Environment for Different Field Conditions: Comparison, Modeling, Rood zone, Salinity...171-174
- G MURTAZA, A. GHAFOOR, M. RANJIHA, M. QADIR: Calcium Losses During Reclamation of Medium-textured Low CEC Saline-Sodic Soils: Calcium, Gypsum, Infiltration, Leaching, Saline-sodic soil, Soil reclamation...175-178
- M. QADIR, A. GHAFOOR, G MURTAZA, H.A. AHMAD: Cycling Tile Drain Water for Crop Production and Reclamation of Aquic Haplargid Soil: Brackish water, FYM, Gypsum, Rice, Salt-affected soil, Soil reclamation...179-182
- R.N. NIGMANOVA: Morphogenesis of Fodder Plants of the Genus *Astragalus*: Internode, Leaf, Morphology, Ontogeny, Shoot...183-185
- Q. QU: The Utilization and Development of Plant-Insecticides in Yulin Sand-land of China: *A. fruticosa*, Natural pesticides, Plant-insectidices, Yulin sand-land...187-190
- Y.S. SALIEVA, K.M. KIRGIZBAEVA, M.S. SAGDULAEVA, M.G. GULYANOVA, A. SHARIPOVA: Micromycetes of Desert Plants in the Kyzylkum: Class, Family, Order, Micromycetes, Subdivision...191-195
- T. Li, Q. GAO: The Ecological Small Oasis in the Heartland of the Taklimakan Desert: Desert, Heartland, Oasis...197-200
- L. YIN, W. YANG: An Evaluation of the Plant Resources and Diversity of *Tamaricaceae* in China: Biodiversity evaluation, Plant resources, *Tamaricaceae*...201-204
- M.M. NIGMATOV, L.N. ALEKSEEEVA: Physiology-biochemical Investigations in Kyzylkum Desert Plants: Kysylcum, Metabolism, Photosynthesis, Pigments, Respiration...205-209
- M. ANAYA-GARDUNO: *Kochia*: A Real Option as a Fodder Crop for Arid Zone: Agronomic aspects, Animal nutrition, Coquia, Fodder crop... 211-214
- B.D. SHARMA, P.S. SIDHU, J.S. BRAR: Response of Wheat and Cotton to Fertilizer Application on Soil of Arid Region in Punjab, India: Arid soils, Cotton, Nitrogen, Phosphorus, Wheat..215-218
- New Technologies for the Rehabilitation of Arid Areas**
- J.L. MCCLAIN: New Technologies for Land Rehabilitation...219-225
- J.A. YOUNG, R.R. BLANK, L. BURNSIDE: Reclamation of Heap-Leach Mining spoils in Arid Environments: Nitrogen, Soil moisture, Weed competition...227-230
- Z. CONG: Control and Rehabilitation of Tailings Desertified Land in Jinchang, China: Artificial vegetaion, Control, Desertification, Tailings ...231-234

- D. BREARLEY, J. OSBORNE: Proactive Rehabilitation of Exploration Disturbances in Semi Arid Western Australia -Black Swan Nickel, Kalgoorlie-: Arid, Chenopods, Revegetation, Saline materials, Semi arid...235-239
- H. HANAOKA, T. OGAWA, J. SHIRATORI, F. IINO, S. MATSUMOTO, Y. NITTA, M. SADAKATA: Improvement of Sodic Soil by Flue Gas Desulfurization Gypsum: Desulfurization, Gypsum, Sodic soil, Soil improvement...241-244
- M. SHARIF, R.H. QURESHI, M. ASLAM, Z. HUSSAIN: Expansion of Revegetation Technology on Salt-Affected Lands for Sustained Production in an Arid Region..245-248
- M. TANIGUCHI, Y. ABE, K. YAMADA, T. KOJIMA, A. WILLIAMS: Possibility of large Scale Afforestation in Arid Lands as a Measure Against Increases in CO₂ Concentration: Afforestation, Classification, Region ...249-252
- J.N. SHRESTHA, T. KOJIMA: Role of PV Technology in the Greenification of Arid Land in Nepal -An Assessment-: Balance of systems, Greenification, PV pumps...253-256
- Z. HUSSAIN, Q. HUSSAIN, M. SHARIF: Research, Development and its Impact on water Management and Farm Production: Impact on farm production, Low irrigation efficiency, Research and development, Water losses, Water saving..257-260
- T. OGAWA, Y. ABE, T. YAMAGUCHI, M. OZAKI, S. YABASHI: Excess water Disposal Using Evaporation Accelerators: Drainage, Evaporation accelerator, Evaporation force, Excess water...261-264
- H. TSOAR, W. ILLENVERGER: Reevaluation of Sand Dunes' Mobility Indices: Desert sand mobility, Sand dunes, Stabilization, Vegetation...265-268
- B. PAN, X. XU, Y. HU: Construction of Vegetation Systems in the Tarim Oil Fields in China: China, Tarim oil field, Vegetation systems, Xinjiang ...269-272
- T. MAKI, M. DU, B. PAN: Desertification of Agricultural Land, Arid Climate, Crop Growth and Prevention of Sand Movement in Xinjiang of Northwest China: Climatic improvement, Desert, Forest and net windbreaks, Meteorological alleviation, Straw-mat network...273-276
- Y. ISHIKAWA, M. KUBOTA, Y. HIRAGA, Y. TAKI, Y. TAKAGISHI, Y. YAMAGUCHI, M. ISHIKAWA, R. NAKATA, H. MIYAMOTO, S. MATSUMOTO: Developing Environmental Rehabilitation and Farming Systems -A Research Project in Kalgoorlie-...277-280
- H. II, T. HIRATA, R. KAWAMURA: Dispersion Coefficients of Unsaturated Sand Determined by Salt Accumulation Analysis: Dispersion, Evaporation, Longitudinal dispersivity, Migration system...281-284
- B. FERGUSSON, A.J. GRAHAM: Quantitative Studies of Soil-plant Relations in the Eastern Goldfields of Western Australia: Classification, Environmental variables, Multivariate analysis, Plant communities, Revegetation...285-288
- F. Jr: Advances in the Control of Salinization in Xinjiang: Comprehensive measures, Control, Salinization..289-292
- J. LEI: Desertification Control on the Fringes of Oases in Xinjiang, China: Desertification control, Fringes of oasis, Xinjiang...293-296
- Z. SUN: Demonstration of the Environment Improvement in the Coal Development Region: Coal field, Demonstration, Environment... 297-300
- Z. SUN, B. DANG: How to Deal with sand Vegetation Problem Caused by Oil and Gas Fields Development in Shaanxi, Gansu and Ningxia: Countermeasure, Vegetation problem...301-306
- N. NOVIKOVA: Ways to Preserve Diversity of Tugai (Wetlands) Plant Communities and Species on the Desertified Deltas of the Aral Sea: Conservation, Desertification, Plant communities, Species, Tugai, Wetland...307-310
- S. KAMALOV, O.A. ASHURMETOV: Phytomelioration of the Aral Sea Dried Bottom and Amudarya Delta: Bottom, Phytomelioration, Saline, Sea, Seaside...311-314
- A. PONNAMBALAM, V. SUGAVANAM, P. DEVAREI, R.S.C. JAYARAJ: Growth Response of *Acacia auriculiformis* and *Casuarina equisetifolia* in Quartz Sand Dumps from Cement Factories: Flootation reject, Rehabilitation, Soil amendment..315-318
- Challenges for the Future**
- C.V. MALCOLM: Landuser Participation in the Development of Technology for Sustainable Use of Arid Areas: Participatory technology development, Sustainability...319-326
- X. XIA: Research and Control of Desert and Desertification in China: Desert research, Desertification control, Institutes of CAS...327-329
- I. ZONN: Mega-Projects of the XXIst Century in Central Asia Related to the Development of Desert Areas: Desert, Pipelines, Transport, Water transfer...331-334
- P. GERAGHTY, G. TEMNEWA: Water Resources Management in Eritrea: the Challenge: Arid, Challenges, Eritrea, ICBM (Integrated Community Based Management), Optimism...335-337
- M. ANDA, K. MATHEW, G HO: Research Project on Sustainable Settlements within the Centre for Arid Lands Science: Aboriginal, Arid, Sustainable, Technology...339-342
- Z. CHEN, Z. ZHU: A New Approach to Combat Desertification in China -an Example of Naimanm...343-345
- R. BOTICA, S. WHITE: Kalgoorlie-Boulder -The Water Efficient City-: Climate correction, Demand management, Kalgoorlie-Boulder, Water efficiency...347-350
- Workshop Recommendations**
- Workshop Sessions...351-358

Vol. 7 No. 1 (1997) (1997.8.25)

口絵

宮崎忠国 : タール沙漠の衛星画像と人間活動による沙漠化/土壤荒廃
原著論文

A.S. RAO, T. MIYAZAKI: Climatic Changes and Other Causative Factors Influencing Desertification in Osian (Jodhpur) Region of the Indian Arid Zone: Climatic changes, Indian arid region, Desertification... 1-11

劉 永誌・吉野正敏 : 中国新疆タクラマカン砂漠のオアシスにおける
経済発展と土地荒廃 : Economic development, Land degradation, Taklimakan desert, Oasis, Arid land agriculture... 13-22

Yuuki YAZAWA, Yutaka SHINODA, Fumihiko YAZAKI, Tatsuaki YAMAGUCHI: Controlling Permeability and Salinity in Sandy Soils with Ammonium Humate: Ammonium humate, Cation exchange, Permeability, Leaching, Sandy soil... 23-33

Tatsuaki YAMAGUCHI, Yasushi NISHIZAKI, Toyohiko HAYAKAWA, Mamoudou RIAD, Michael IBRAHIM, Nabil FANOUS, Nikolai BAMBALOV, Guennadi SOKOLOV: Arid Land Reclamation with Natural Organic Materials -Effect of Peat-Sapropel Based Ameliorant on Green Cabbage and Wheat Cultivation in the Egyptian Western Desert: Egyptian desert, Sandy soils, Field experiment, Green cabbage, Wheat, Natural organic materials... 35-45

西上泰子 : 沙漠開発の視点からみた世界の沙漠面積 : Desert area, Precipitation, Shoreline, Solar energy, Desert development... 47-52

Akihiko OKADA, Sadayo YABUKI, Cong-Qiang LIU, Akira UEDA, Zi-Li FAN, Qing CHANG: Salt Efflorescent Materials in Saline Lands of Xinjiang, China: Evaporite, Desert, Xinjiang... 53-67

小特集

沙漠工学研究分科会 : 小特集 第7回沙漠工学講演会講演要旨集... 69-70

高橋 悟 : ジプチにおける砂漠緑化 Water harvesting による実践 ... 71-76

安部征雄・小島紀徳・山田興一 : 二酸化炭素対策としての乾燥地域における大規模植林... 77-81

書評

赤木祥彦 : 原 隆一著「イランの水と社会」... 83

Vol. 7 No. 2 (1997) (1997.12.25)

口絵

長島秀樹・岡田菊夫・竹見哲也 : 中国内陸部のダストストーム

特集 : アジア内陸起源の風送ダスト

長島秀樹・岡田昭彦・矢吹貞代・三上正男 : 「特集:アジア内陸起源の風送ダスト」編集にあたって... 85-86

特集原著論文

竹見哲也 : 1993年5月5日の中国北西部に発生したダストストームとその発生環境 : Black storm, Squall line, Moisture flux, Gobi desert... 87-96

三上正男 : タ克拉マカン砂漠南縁で発生したダストストーム : Dust storm, Taklimakan desert, Tarim basin, Topographical effect, Downslope wind... 97-106

甲斐憲次・高杉年且・中村 一 : タ克拉マカン沙漠を起源とする黄砂の長距離輸送について: Asian duststorm (Kosa), Taklimakan desert, Lidar, Long range transport... 107-117

大日方 裕・柳澤文孝・小谷 卓・上田 晃 : 山形県鶴岡市と山形市の乾性降下物に含まれている非海塩性硫酸イオンのイオウ同位体比 : Aerosol, Sulfur isotope, Dry deposition, Kosa, Non-sea-salt sulfate... 119-126

Sadayo YABUKI, Akihiko OKADA, Akira UEDA, Qing CHANG, Zi-Li FAN: Sulfur Isotope Study of Salt Materials in Saline Lands and Salt Deposits around the Desert Areas in Xinjiang, China -Implications to the Study of the Source of the Aeolian Dust of Inland Asia-: Sulfur isotope ratio, Evaporite, Desert, Aeolian dust, Xinjiang... 127-138

Masatoshi HONDA, Hiroshi SHIMIZU: Study of Transport Mechanism of Aeolian Sediments from the Taklimakan Desert -Implication of Grain-Size Distribution and Major-Element Composition: Taklimakan desert, Aeolian sediment, Grain size distribution, Major-element composition, Transport mechanism... 139-146

権 成頼・岩坂泰信・松永捷司・柴田 隆 : 黄砂エアロゾルの長距離輸送 - 1994年春期のライダー観測を中心に - : Kosa aerosol particle, Lidar measurement, Free troposphere, Long range transport, Discriminant analysis, Chemical transfer... 147-155

Yasunobu IWASAKA, Masaharu HAYASHI, Ikuko MORI, Sun An KWON, Katsuji MATSUNAGA, Guang Yu SHI, Jun ZHOU, Takashi SHIBATA, Masataka NISHIKAWA, Yasuhiko OKUHARA, Keiichiro HARA, Masahiro NAGATANI, Masaharu WATANABE, Yoon Sin KIM, Zhi Ben GONH: Aerosol Particles in the Asian Continental Atmosphere -Balloon-borne, Aircraft-borne, and Lidar Measurements in Japan and China-: Aerosol particle, Asian continental atmosphere, Balloon-borne measurement... 157-167

特集短報

安井元昭・水谷耕平・板部敏和・高部政雄・周 紀俠・凌 裕泉・劉 立超 : 中国蘭州における対流圏エアロゾルのライダー観測: Lidar, Aerosol, China, Dust, Observation... 169-173

特集展望論文

井伊博行・平田健正 : 黄土高原の土壤浸食とダスト中の窒素化合物について : Loess, Nitrogen isotope, Dust, Soil erosion... 175-180

特集資料

矢吹貞代・岡田昭彦 : 中国 新疆ウイグル自治区の地名表記... 181-184

原著論文

Wenhong MO, Toshiki NATORI, Shu JIANG, Noboru NISHIMURA, Kenji OMASA: Responses of Photosynthesis and Water Use to Drought in Two Desert Annuals, *Agriophyllum squarrosum* and *Bassia dasypylla*: *Agriophyllum squarrosum*, *Bassia dasypylla*, Leaf water potential, Photosynthesis, Soil moisture... 185-195

鷹木恵子 : チュニジアのナツメヤシ民族文化 - ジェリード地方のオアシスの事例 - : Date palm, Folk culture, Utilization of palm tree, Symbolism, Changes... 197-214

Vol. 7 S (1998) (1998.3.31)

Special issue: Proceedings of Desert Technology IV

an Engineering foundation Conference

Articles with full paper review

The World's Arid Areas - Global and Regional Assessment of the Past, Present and Future

V.R. SQUIRES: The World's Drylands and Global Change in the Twenty-first Century: Challenges and Prospects: Carbon sequestration, Economic growth, Population, Technology... 1-13

W.T. HARTWELL: Lithic Resource Depletion by Early Prehistoric Populations in the Desert West of North America: Depletion, Lithic resources, Obsidian hydration, Recycling... 15-18

C.M. BECK: Arid North Coast of Peru: Survival Strategies of Ancient Civilizations: Archaeology, Peru... 19-22

G. BASTIN, V. CHEWINGS: Monitoring Grazing Impact with Satellite Data: Grazing gradient, Land degradation, Monitoring, Satellite data, Videography... 23-26

R. SMITH, C. McMILLAN, R. CRAIG, J. ADAMS, M. STEBER: Satellite Monitoring of Bush Fires in Western Australia: Bush fires, Monitoring, NOAA-AVHRR... 27-30

S. KUMAR: Effect of the Great Indian Desert on Acidic Deposition -The Changing Pattern-: Acidic deposition, Ecosystem, Thar desert... 31-34.

H. PRINGLE: Environmental Auditing Beyond 'Range Condition' -A Western Australian Perspective-: Ecological hierarchy, Range condition, Values... 35-38

K. LEIGHTON, S.V. VREESWYK: Sustainable Pastoral Land Use in an Arid Climate -A Shiny, New Toolbox!-: Management, Rangelands, Pastoralism... 39-42

- K. PAHARI, S. MURAI: Global Water Erosion Modeling Using Remote Sensing and GIS: DEM, GIS, Remote sensing, Soil erosion...43-46
- S. TAKAHASHI, F. WATANABE, T.M. ISMAEL, K. SAKURADA: The Characteristics of Rainfall in the Republic of Djibouti: Area rainfall, Desert greening, Irrigation, Mean elevation method, Sustainable agriculture...47-50
- W. SHEN, G DONG, S. LI: Desertification and its Developing Trend on the Tibetan Plateau, China: Land desertification, Tibetan plateau...51-53
- R. ADILLA, A. KURBAN, A. IBRAHIM: The Reasons of Land Desertification and Its Prevention and Control Ways: Amelioration, Desertification, Prevention...55-57
- L. KAPUSTINA: Assessment and Mapping of the Desertification: Degrading vegetation, Desert, Desertification, Wind erosion...59-61
- K.T. TURSUNOV: On the Regional Problem of Desertification in Central Asia: Convention, Degradation, Desertification, Ecosystem, Strategy ...63-66
- New Technologies for Sustainable Production in Arid Areas**
- G.A. ROBERTSON: New Technologies for Sustainable Production in Arid Areas...67-76
- P. COMMANDER: Groundwater from Australian Deserts: Desert, Fossil groundwater, Groundwater, Sedimentary basins...77-80
- S. SINHA, N. KUMAR, A. GHOSH, S. KUMAR: Desert-Inland-Marine Solartopia: Afforestation, Desert irrigation, Solar still...81-84
- T. YAMAGUCHI, M. YOKOTA, Y. ABE, S. YOKOTA: Performance Analysis of Basin-type Solar Stills Equipped with Evaporation and Condensation Stimulators: Basin-solar still, Covering materials, Evaporation stimulator...85-88
- M. ANDA, G HO, K. MATHEW: Wastewater Reuse for Revegetation and Permaculture in Arid Lands: Food production, Greywater reuse, Revegetation...89-92
- M. OZAKI, Y. ABE, H. KOKUBU, T. UMETSU, S. TAKAHASHI: Feasibility Study for Recycling Use of Waste Water in Arid and Semi-Arid Lands: Arid land, Recycling use, Waste water treatment, Water sources ...93-96
- Y. HU: A Study of Vegetable Growing Technology in the Taklimakan Desert: Saline water, Taklimakan desert, Vegetable growing...97-99
- S. APPLEBAUM: Desert Aquaculture -A New Opportunity for World Aquaculture Production:- Aquaculture, Desert, Food production... 101-103
- J.A. YOUNG, F. TIPTOM: Range Livestock in the Great Basin of North America: Range, Restoration ecology...105-108
- R.A. GILL, J.A. BHATTI: Sustainable Ruminants Production System under Stress Lands in Pakistan: Acceptability, *Atriplex amnicola*, Palatability, Replacement, Saline sodic soils...109-112
- D.M. ANDERSON: Pro-active Livestock Management -Capitalizing on Animal Behavior:- Canine predation, Flerds, Livestock behavior... 113-116
- K. TAHARA, T. KOJIMA, A. INABA: Water Management for Sustainable Forest Systems in Arid Land -CO₂ Reduction and Solar Energy Utilisation:- CO₂, Forest, Precipitation...117-120
- S. KOMIYAMA, K. MATSUYAMA, N. MIYAHARA, K. MURASE: Development of a Roof Type Solar Membrane Distillator for Desert Afforestation: Desert afforestation, Membrane distillator, PTFE membrane ... 121-124
- D. HARRISON, G HO: Solar Powered Reverse Osmosis Desalination: Brackish water, Desalination, Remote area, Reverse osmosis, Solar power...125-128
- T. GAWTHORNE, K. MATHEW, R. GIBBS, J. PILLAI, G.E. HO, M. ANDA: Bacteriological Water Testing in Remote Localities: Bacteriological, Remote localities, Water testing...129-132
- S. YANASHI, A. HAMACHER, J. LIU, Y. ABE, S. TAKAHASHI: Studies on the Changes of Soil Physical Properties by Adding Water Holding Polymers: Compaction of soil, Permeability, pF-moisture, Polymer... 133-136
- K.N. TODERICH, K. IDZIKOWSKA, H.R.HALILOV: Hardness of Seeds and Germination Dynamics of Fabaceae Arid Species: Acid sulfuric, Embryo, Fabaceae, Hardness, Palisade tissue, Seeds, Seed coat... 137-140
- S. MATSUDA, T. SANO, Y. OKANO: Numerical Simulation of Ascending Current for Artificial Rainfall: Artificial rainfall, Ascending current, Numerical simulation, Thermal convection...141-144
- X. XU, J. JIANG: The Utilization of Salt Water by Solar Distiller in Taklimakan Desert: Salt water, Solar distiller, Taklimakan desert... 145-147
- Q. GAO, H. DU, J. MA: Water Resources and Their Sustainable Utilization in Arid Northwestern China: Arid NW China, Sustainable utilization, Water resources...149-152
- A. ABDULLAEV, B. KAMALOV, V. DEEVA: Prospects of Halotolerant Microalgae Photobiotechnology in Uzbekistan Desert Zones: Biochemical composition, Dunaliella, Method, Microalgae, Optimization, Productivity...153-156
- A.A. ABDULLAEV, V.P. KJJAT: Growing Cotton in the Uzbekistan Arid Zone: Adaptation, Anatomy, Cotton species, Morphlogy...157-160
- M. AKRAM, B.A. CHANDIO: Conjunctive Use of Rainwater and Saline Groundwater for Desertification Control in Pakistan through Agro -forestry and Range Management: Conjunctive, Desertification, Vegetation, Water harvesting...161-164
- A. GHAFOOR, M. QADIR, G MURTAZA, H.R. AHMAD: Strategies to Harvest Sustainable Rice and Wheat Yields Using Brackish Water for Irrigation: Chemical and physical soil properties, Drainage water, Economics, Rice, Wheat...165-169
- M. LATIF, S. MAHMood, S. MAHMood: Application of Salt Prediction Models in Irrigated Environment for Different Field Conditions: Comparison, Modeling, Rood zone, Salinity...171-174
- G MURTAZA, A. GHAFOOR, M. RANJIHA, M. QADIR: Calcium Losses During Reclamation of Medium-textured Low CEC Saline-Sodic Soils: Calcium, Gypsum, Infiltration, Leaching, Saline-sodic soil, Soil reclamation...175-178
- M. QADIR, A. GHAFOOR, G MURTAZA, H.A. AHMAD: Cycling Tile Drain Water for Crop Production and Reclamation of Aquic Haplargid Soil: Brackish water, FYM, Gypsum, Rice, Salt-affected soil, Soil reclamation...179-182
- R.N. NIGMANOVA: Morphogenesis of Fodder Plants of the Genus *Astragalus*: Internode, Leaf, Morphology, Ontogeny, Shoot...183-185
- Q. QU: The Utilization and Development of Plant-Insecticides in Yulin Sand-land of China: *A. fruticosa*, Natural pesticides, Plant-insectidices, Yulin sand-land...187-190
- Y.S. SALIEVA, K.M. KIRGIZBAEVA, M.S. SAGDULAEVA, M.G. GULYANOVA, A. SHARIPOVA: Micromycetes of Desert Plants in the Kyzylkum: Class, Family, Order, Micromycetes, Subdivision...191-195
- T. Li, Q. GAO: The Ecological Small Oasis in the Heartland of the Taklimakan Desert: Desert, Heartland, Oasis...197-200
- L. YIN, W. YANG: An Evaluation of the Plant Resources and Diversity of *Tamaricaceae* in China: Biodiversity evaluation, Plant resources, *Tamaricaceae*...201-204
- M.M. NIGMATOV, L.N. ALEKSEEEVA: Physiology-biochemical Investigations in Kyzylkum Desert Plants: Kysylcum, Metabolism, Photosynthesis, Pigments, Respiration...205-209
- M. ANAYA-GARDUNO: *Kochia*: A Real Option as a Fodder Crop for Arid Zone: Agronomic aspects, Animal nutrition, Coquia, Fodder crop... 211-214
- B.D. SHARMA, P.S. SIDHU, J.S. BRAR: Response of Wheat and Cotton to Fertilizer Application on Soil of Arid Region in Punjab, India: Arid soils, Cotton, Nitrogen, Phosphorus, Wheat..215-218
- New Technologies for the Rehabilitation of Arid Areas**
- J.L. MCCLAIN: New Technologies for Land Rehabilitation...219-225
- J.A. YOUNG, R.R. BLANK, L. BURNSIDE: Reclamation of Heap-Leach Mining spoils in Arid Environments: Nitrogen, Soil moisture, Weed competition...227-230
- Z. CONG: Control and Rehabilitation of Tailings Desertified Land in Jinchang, China: Artificial vegetaion, Control, Desertification, Tailings ...231-234

- D. BREARLEY, J. OSBORNE: Proactive Rehabilitation of Exploration Disturbances in Semi Arid Western Australia -Black Swan Nickel, Kalgoorlie-: Arid, Chenopods, Revegetation, Saline materials, Semi arid...235-239
- H. HANAOKA, T. OGAWA, J. SHIRATORI, F. IINO, S. MATSUMOTO, Y. NITTA, M. SADAKATA: Improvement of Sodic Soil by Flue Gas Desulfurization Gypsum: Desulfurization, Gypsum, Sodic soil, Soil improvement...241-244
- M. SHARIF, R.H. QURESHI, M. ASLAM, Z. HUSSAIN: Expansion of Revegetation Technology on Salt-Affected Lands for Sustained Production in an Arid Region..245-248
- M. TANIGUCHI, Y. ABE, K. YAMADA, T. KOJIMA, A. WILLIAMS: Possibility of large Scale Afforestation in Arid Lands as a Measure Against Increases in CO₂ Concentration: Afforestation, Classification, Region ...249-252
- J.N. SHRESTHA, T. KOJIMA: Role of PV Technology in the Greenification of Arid Land in Nepal -An Assessment-: Balance of systems, Greenification, PV pumps...253-256
- Z. HUSSAIN, Q. HUSSAIN, M. SHARIF: Research, Development and its Impact on water Management and Farm Production: Impact on farm production, Low irrigation efficiency, Research and development, Water losses, Water saving..257-260
- T. OGAWA, Y. ABE, T. YAMAGUCHI, M. OZAKI, S. YABASHI: Excess water Disposal Using Evaporation Accelerators: Drainage, Evaporation accelerator, Evaporation force, Excess water...261-264
- H. TSOAR, W. ILLENVERGER: Reevaluation of Sand Dunes' Mobility Indices: Desert sand mobility, Sand dunes, Stabilization, Vegetation...265-268
- B. PAN, X. XU, Y. HU: Construction of Vegetation Systems in the Tarim Oil Fields in China: China, Tarim oil field, Vegetation systems, Xinjiang ...269-272
- T. MAKI, M. DU, B. PAN: Desertification of Agricultural Land, Arid Climate, Crop Growth and Prevention of Sand Movement in Xinjiang of Northwest China: Climatic improvement, Desert, Forest and net windbreaks, Meteorological alleviation, Straw-mat network...273-276
- Y. ISHIKAWA, M. KUBOTA, Y. HIRAGA, Y. TAKI, Y. TAKAGISHI, Y. YAMAGUCHI, M. ISHIKAWA, R. NAKATA, H. MIYAMOTO, S. MATSUMOTO: Developing Environmental Rehabilitation and Farming Systems -A Research Project in Kalgoorlie-...277-280
- H. II, T. HIRATA, R. KAWAMURA: Dispersion Coefficients of Unsaturated Sand Determined by Salt Accumulation Analysis: Dispersion, Evaporation, Longitudinal dispersivity, Migration system...281-284
- B. FERGUSSON, A.J. GRAHAM: Quantitative Studies of Soil-plant Relations in the Eastern Goldfields of Western Australia: Classification, Environmental variables, Multivariate analysis, Plant communities, Revegetation...285-288
- F. Jr: Advances in the Control of Salinization in Xinjiang: Comprehensive measures, Control, Salinization..289-292
- J. LEI: Desertification Control on the Fringes of Oases in Xinjiang, China: Desertification control, Fringes of oasis, Xinjiang...293-296
- Z. SUN: Demonstration of the Environment Improvement in the Coal Development Region: Coal field, Demonstration, Environment... 297-300
- Z. SUN, B. DANG: How to Deal with sand Vegetation Problem Caused by Oil and Gas Fields Development in Shaanxi, Gansu and Ningxia: Countermeasure, Vegetation problem...301-306
- N. NOVIKOVA: Ways to Preserve Diversity of Tugai (Wetlands) Plant Communities and Species on the Desertified Deltas of the Aral Sea: Conservation, Desertification, Plant communities, Species, Tugai, Wetland...307-310
- S. KAMALOV, O.A. ASHURMETOV: Phytomelioration of the Aral Sea Dried Bottom and Amudarya Delta: Bottom, Phytomelioration, Saline, Sea, Seaside...311-314
- A. PONNAMBALAM, V. SUGAVANAM, P. DEVAREI, R.S.C. JAYARAJ: Growth Response of *Acacia auriculiformis* and *Casuarina equisetifolia* in Quartz Sand Dumps from Cement Factories: Flootation reject, Rehabilitation, Soil amendment..315-318
- Challenges for the Future**
- C.V. MALCOLM: Landuser Participation in the Development of Technology for Sustainable Use of Arid Areas: Participatory technology development, Sustainability...319-326
- X. XIA: Research and Control of Desert and Desertification in China: Desert research, Desertification control, Institutes of CAS...327-329
- I. ZONN: Mega-Projects of the XXIst Century in Central Asia Related to the Development of Desert Areas: Desert, Pipelines, Transport, Water transfer...331-334
- P. GERAGHTY, G. TEMNEWA: Water Resources Management in Eritrea: the Challenge: Arid, Challenges, Eritrea, ICBM (Integrated Community Based Management), Optimism...335-337
- M. ANDA, K. MATHEW, G HO: Research Project on Sustainable Settlements within the Centre for Arid Lands Science: Aboriginal, Arid, Sustainable, Technology...339-342
- Z. CHEN, Z. ZHU: A New Approach to Combat Desertification in China -an Example of Naimanm...343-345
- R. BOTICA, S. WHITE: Kalgoorlie-Boulder -The Water Efficient City-: Climate correction, Demand management, Kalgoorlie-Boulder, Water efficiency...347-350
- Workshop Recommendations**
- Workshop Sessions...351-358

Vol. 8 No. 1 (1998) (1998.6.25)

口絵

高橋 悟・渡邊文雄・ISMAEL Tabarek M.・高橋久光・福永健司：ジブチ共和国における水面蒸発量の推定と緑化への利用

原著論文

横田博実・切岩 祥和：沙漠地域における農業開発と緑化 - アラブ首長国連邦の場合 - : Afforestation, Agriculture, Groundwater, Salinity, United Arab Emirates...1-12

Bing ZHANG, Qingxi TONG, Lanfen ZHENG, Jinlian WANG, Xiangjun WANG: Study on the Land Cover Change in the Loess Plateau of China : Loess plateau, Land cover change, Remote sensing...13-18

小川哲夫・安部雄正：蒸発排水法における蒸発促進剤の性状と形態の相異が蒸発量に及ぼす影響: Evaporation drainage, Excess water, Evaporative force, Evaporation accelerator...19-25

高橋 悟・渡邊文雄・ISMAEL Tabarek M.・高橋久光・福永健司：ジブチ共和国における水面蒸発量の推定と緑化への利用について : Water surface evaporation, Evapotranspiration, Water harvesting, CCR (Catchment/Cropped Area Ratio)...27-35

Melkamu REGEA, Yoshinobu KITAMURA, Tomohisa YANO: Assessment of Surge Flow Irrigation and Evaluation of Furrow Infiltration Estimation Methods: Furrow irrigation, Surge flow, Furrow infiltration, Volume balance...37-46

Ariyoshi KUSUMI, Toyoaki MORISHITA: Construction of Water and Salt Balance Simulation Model to Forecast Long Term Effect of Irrigation Agriculture: Waterlogging, Salinization, Irrigation agriculture, Simulation model...47-60

短報

Fenghe JIN, Tasushi NISHIZAKI, Huaining YIN, Hongxiang BAI, Yingshun ZHENG, Chunyu WANG, Tatsuaki YAMAGUCHI: Effects of the Peat Application on the Improvement of Alkali Soil -A Case Study of Maize Cultivation in the Field of Keerqin Desert, China-: Alkali soil, Peat, Keerqin desert, Exchangeable sodium, Maize, Field cultivation ...61-68

小特集

沙漠工学分科会・バイオビレッジ分科会合同講演会(第8回沙漠工学講演会)講演要旨集...69-70

長濱 直: 中国内蒙ゴホルチン沙漠におけるバイオビレッジ建設構想 - 庫倫旗額勒順鎮における沙漠化防治モデル事業 - ...71-76

真木太一: 中国の沙漠化・緑化と食料危機...77-83

Vol. 8 No. 2 (1998) (1998.12.25)

口絵

杜 明遠: 中国タクラマカン沙漠における水と植生の関係

展望・総説

吉野正敏: タクラマカン沙漠の自然と人間生活: Desert, Desertification, Human life, Nature, Taklimakan...85-94

原著論文

真木太一・杜 明遠・大場和彦: 中国の乾燥地トルファンにおける防風林による気象改良と作物生育との相互関係: Crop growth, Meteorological improvement, Plant height, Windbreak, Wind speed...95-104

西上泰子: 沙漠開発の視点からみた世界人口と自動車台数の分布: Deserts, World population, Cars, Solar energy...105-111

Tared H.S. KOTB, Tsugihiro WATANABE, Yoshihiko OGNO, Takao NAKAGIRI: Possibility of Agricultural Expansion in Egypt in View of the Available Water Resources: Egypt, New agricultural expansion policy, Water resources, Non-recoverable consumption, Unavoidable losses...113-128

Edward B. SABI, Takao AMAYA, Naomasa NISHIMURA, James D. RHOADES, Scott M. LESCH: Salinity Distribution in Seedbed and Furrow Sections in the Coachella Valley, USA: Salinity distribution, Seedbed, Southern California, Coachella valley, Soil properties, Salt concentration...129-140

資料

山本太平・鳥井清司・Abbas KESHAVARZ・Ebrahim PAZIRA・池浦 弘: イラン国の沙漠化と塩類問題 - 乾燥地の灌漑農業における持続的発展 - : Largescale irrigation project, River water resource, Waterlogging, Sodic soil, Surface irrigation system, Drainage system ...141-149

川鍋祐夫・南 寅鎧・押田敏雄・寇 振武・蒋 德明: 中国東北西部および内蒙古東部草原の沙漠化の現状と回復対策: Biomass of grasslands, Countermeasures of degradation, Desertification, Degradation of Chinese grassland...151-160

小特集

ダスト・ストーム研究会: 第3回ダスト・ストーム研究会シンポジウム講演要旨集「乾燥地起源の風送ダスト 発生・長距離輸送・環境影響」...163-164

吉野正敏: ダストストームに関する気候学的・人文地理学的研究の展望と課題 中国のダストストームと人間生活 ...165-168

三上正男: ダストストームの発生, ダストの長距離輸送 A Brief Review ...169-171

甲斐憲次・熊 小寧・小柴 厚: 東アジアにおける砂塵嵐発生の地理的分布と長距離輸送...173-176

安井元昭・水谷耕平・板部敏和・高部政雄・周 紀俠・凌 裕泉・劉 立超: 中国蘭州における大気中微粒子のライダー観測...177-180

長島秀樹: 最近のWIND EROSION MODEL...181-184

羽田野祐子: チエルノブイリでの放射性エアロゾルの長期挙動と砂漠のバルハーンへの応用...185-189

真木太一・杜 明遠: 中国トルファンの砂丘移動と防砂について...191-194

清野直子: ダストストーム発生に関する数値モデリングの試み(序報) ...195-196

栗田 進: 粒子状物質の大気中への再飛散と粒子層の相対湿度...197-198

小黒剛成・山田 研・菅 雄三・竹内章司・土屋 清: 衛星データによるタクラマカン沙漠の土壤水分解析...199-201

岡田昭彦: 大気ダストの発生源物質とその性状 発生源特定の地球化学的アプローチとその視点 ...203-205

本多将俊・清水 洋: 中国各地の砂漠堆積物と黄土の地球科学的特徴 ...207-208

田中俊平・柳澤文孝・小谷 卓: 山形県山形市および鶴岡市における乾性降下物中の主要成分の季節変化...209-213

田中真理子・柳澤文孝・矢吹貞代・小谷 卓: 山形県におけるエアロゾル中のSr同位体比の季節変動...215-218

書評

嶋田義人: イブラヒーム・アル・クーニー著 奴田原睦明訳「ティブル」...219-220

一國雅巳: Iwao KOBORI, Michael H. GLANTS eds., Central Eurasian Water Crisis -Capsian, Aral, and Dead Seas-...221

袴田共之: 遠藤 勲ら編著「沙漠工学」...222

Vol. 9 No. 1 (1999) (1999.4.25)

巻頭言

小林登史夫：沙漠研究の特性，“複合化”

口絵

蒲生 稔：気候と植生による乾燥地域の分類

山川修治：エルニーニョ現象最盛期とポストエルニーニョ期における合成高層雲量分布

真木太一：沙漠化防止としての緑の沙漠を夢見て

総説特集：「沙漠の気象・気候・微気象から大気候まで -」

真木太一・杜 明遠：沙漠の微気象と微気候改良：Desert, Microclimate, Microclimatic improvement, Micrometeorological phenomena, Windbreak...1-10

杜 明遠・真木太一：沙漠化・綠化と気候変化：Biomass increasing, Climate change, Desertification, Feedback, Relationship...11-16

蒲生 稔：気候と植生からみた乾燥域の分類：Desertification, Vegetation index, Aridity index, Remote sensing, Soil degradation...17-26

山川修治：沙漠化と地球温暖化・エルニーニョ：Desertification, Global warming, El Niño, La Niña...27-36

展望総説

小林登史夫：農業から始まった常識と危機管理体制の違い - 1200年以降の日本と西欧とを比較して - : ...37-44

真木太一：緑の沙漠を夢見て：Desert, Desertification, Greening, Sand dune, Arid land, Dry climate...45-49

原著論文・論説

小川哲夫・安部征雄・尾崎益雄：塩類が蒸発促進材の蒸発促進効果に及ぼす影響：Evaporation, Drainage, Excessive water, Salt accumulation, Evaporation accelerator...51-59

真木太一：天童市ジャガラモガラ盆地の風穴と乾燥地トルファンのカレーズの気候特性：Cave or hole, Karez, Basin or hollow, Cool wind in summer, Air temperature, Vegetation inversions...61-78

小特集

沙漠工学分科会：小特集 沙漠工学分科会第9回講演会および第10回記念講演会...79-80

篠田 裕：乾燥地における土壤水分計測の実際...81-89

Sangeeta SINHA, Toshinori KOJIMA, Sanjay KUMAR: Major Solar Thermal Applications in India -Development, Viability and Limitations-: India, Solar thermal application, Development...91-97

Masao TOYAMA: Present Conditions and Protection Policies of the Desertification in the Great Grassland in Mongolia...99-104

山口達明：現地産天然腐植資材を利用する荒漠化防止：Desertification, Humic substances, Controlled water supply, Alkali soil, Acid soil...105-122

書評

山川修治：赤木祥彦「図説 沙漠への招待」...123

おあしす【学会報告／会員のページ】...pp.11

Vol. 9 No. 2 (1999) (1999.7.25)

巻頭言

牛木久雄：砂漠化問題と沙漠開発

展望論文

平田昌弘・真常仁志・北川政幸・石田定顕・小崎 隆・宮崎 昭：カザフスタン共和国の家畜生産と農民経営の動向：Kazakhstan, Economical disorder, Agricultural production, Private farmer...125-134

原著論文・論説

Rupari DATTA, Sanjay KUMAR: Water and Salt Stress Mediated Induction of β -amylase -Selection of Species for Arid and Semi-arid Areas Plantation: *Pennisetum americanum*, *Zea mays*, β -amylase, Norflurazon, Stress...135-142

Koichi YAMADA, Toshinori KOJIMA, Yukuo ABE, Aidrian WILLIAMS, John LAW: Carbon Sequestration in an Arid Environment Near Leonora,

Western Australia: Afforestation, Arid land, Carbon sequestration, Biomass...143-151

Muhtar QONG, Tamotsu IGARASHI: Environmental Changes Deduced from Satellite Data in Arid Regions -A Case Study in the Lower Reaches of the Hotan and Yarkant Rivers, China-: Change detection, Radiometric normalization, Statistical normalization, SAVI, Image differencing, Density slice...153-167

松本 剛・小島紀徳・若林宏明：塩生バイオマス栽培への適用を目的とした砂層中の横方向飽和浸透流解析・実験：Desertification, Halophytes, Irrigation, Transient flow, Drainage...169-174

Kazuhiko KATO, Hiroshi FUKUNAGA, Koichi YAMADA: Life-cycle Evaluation of Solar Home System and Small Engine in Rural Areas: Photovoltaic solar cell, Solar home system, Life-cycle assessment...175-180

おあしす【学会報告／会員のページ】...pp.8

Vol. 9 No. 3 (1999) (1999.10.25)

巻頭言

片倉もとこ：沙漠のうた - 産業型開発から文化型開発へ -

総説特集：「耐塩性・耐乾燥性植物と沙漠緑化」

若林宏明：総説特集企画「耐塩性・耐乾燥性植物と沙漠緑化」...181

平田收正・宮本和久：生物資源の保存と耐性・耐乾性：Cryopreservation, Plant germplasm, Abscisic acid, Encapsulation-dehydration ...183-188

一前宣正：中国黄淮海平原における耐塩性植物の選抜：Salt tolerant plants, Weed, Huang-Huai-Hai plain...189-193

遠藤 昇・吉田光毅・秋吉美穂：沙漠緑化用海水耐性植物の遺伝子解析：Salt tolerance, Seawater tolerance, NaCl regulation, Waxy layer, Apoplast system...195-207

田中 章・林 泰行・高倍鉄子：遺伝子組換え技術による耐塩性・耐乾燥性植物の作出：Environmental stress, Compatible solute, Glycine betaine, Transgenic plants, Genetic engineering...209-214

松本 剛・小島紀徳・若林宏明：塩生植物を用いた広域沙漠緑化の最近の動向：Desertification, Halophytes, Irrigation, Seawater, Crop...215-222

青木卓也・松本 聰：西オーストラリア・カルグリーにおける土壤改良, 植生回復：Selection of useful plants, Systematizing techniques, Companion plant, Compost pot, Economic tree...223-228

加藤 茂・中須賀常雄：マングローブの生理と植林：Mangrove, Physiology, Afforestation, Carbon dioxide fixation, Bio-diversity...229-236

展望総説

都留信也：中央アジア冷涼乾燥地域の沙漠の現状とその発展方向...237-241

原著論文・論説

西崎 泰・金 凰鶴・尹 懐寧・白 鴻祥・鄭 応順・王 春裕・山口達明：アルカリ土壤の改良におけるピートの施用効果並びにピート採掘跡地利用に関する経済評価 - 中国・カルチン沙地科左后旗地区におけるケーススタディー - : Economic assessment, Improvement of alkaline soil, Peat, Peat goaf, Cost...243-252

おあしす【学会報告／会員のページ】...pp.10

Vol. 9 No. 4 (1999) (199.12.25)

巻頭言

安部征雄：日本沙漠学会の活動状況について

展望総説

高橋 裕：世界水会議と沙漠...253-256

原著論文・論説

Masahiro HIRATA, Haruhiro FUJITA, Jyoken ISHIDA, Masayuki KITAGAWA,

- Akira MIYAZAKI: Historical Changes in Grazing Forms of Arabian Pastoralists in Syria: Historical change, Grazing, Arabian pastoralist, Motorization, Syria...257-266
- Anatoly GTELSON, Heike SCHMIDT: Monitoring Vegetation Dynamics in Israeli Transition Zone with Advanced Very High Resolution Radiometer Data: Remote Sensing, NOAA/AVHRR, Transition zone, Monitoring of vegetation...267-275

短報

- Gary A. HUCKLEBERRY: Prehistoric Flooding and Its Effect on Indigenous Agriculture in the Northern Sonoran Desert, U.S.A.: American southwest, Dendrohydrology, Stratigraphy, Paleofloods...277-284

- Rupali DATTA, Sanjay KUMAR, Tsuyoshi MATSUMOTO, Toshinori KOJIMA: Identification of Novel α -Amylase Isoform in Maize Chloroplast: α -Amylase, Maize, Nitrate metabolism, Starch metabolism, Sucrose ...285-290

- 西崎 泰・篠田 裕・山口達明：砂質土壤に対する都市ゴミコンポストの施用効果に関するコスト計算 エジプト西沙漠における小麦栽培についてのケーススタディー：Waste compost, Cost accounting, Sandy soil, Wheat farming, Economic effects...291-296

資料・報告

- 矢沢勇樹・山口智治・安部征雄・山口達明：西オーストラリア半乾燥耕作地帯の土壤酸性化によるアルミニウム害の現状とその対策：Soil acidification, Aluminum toxicity, Liming, Natural organic material...297-309

- ダストストーム研究グループ（中国科学院新疆分院，新疆ウイグル自治区気象局）- 吉野正敏・趙 景峰（抄訳）- : 1998年4月18日に新疆ウイグル自治区において発生した特強ダストストーム：Dust storm, Wind damage, Xinjiang...311-318

- おあしす【学会報告／会員のページ】...pp.8

Vol. 10S (2000) (2000.3.31)

Special Issues: Proceedings of the International Conference on DESERT TECHNOLOGY V

Preface

James YOUNG: Desert Technology V, Deserts in Changing Times...1-2

Session I

Paul TUELLER: Plant Geography and Physiography of Great Basin Deserts: Climate, Physiography, Soils, Vegetation...3-4

Robin TAUSCH, Cheryl L. NOWAK: Influences of Holocene Climate and Vegetation Changes on Present and Future Community Dynamics: Community, Great basin, Holocene, Vegetation, Woodlands...5-8

Taichi MAKI, Mingyuan DU: Recent Climatic Change and Micro-Climatic Alleviation by Windbreaks in Arid Land of Northwestern China: Climate changes, Climatic improvement, Desert, Oasis, Windbreak...9-12

Dayin LI, Hiroshi KOMIYAMA, Kazuo KURIHARA, Yasuo SATA: The Impact of Desert Afforestation on Weather Modification in Western Australia in Summer: Desert forestation, Local weather modification, Surface characteristics...13-16

Gary W. FRASIER: Water Supply for Arid and Semiarid Regions: Precipitation collection, Water harvesting, Water supply...17-20

Session II

Tetsuo OGAWA, Daiji NAITO, Yukuo ABE: Disposal of Salt Water on the Evaporation Drainage Method: Drainage, Evaporation, Evaporation accelerator, Excess water, Salt accumulation...21-24

Hiroyuki HAMANO, Yasuyuki EGASHIRA, Toshinori KOJIMA: Numerical Prediction of Water Movement In Western Australian Soil for Large Scale Afforestation: Afforestation, CO₂, Simulation...25-28

Yacouba KAME, Kunihiko NISHIO, Satoru TAKAHASHI, Fumio WATANABE: Meteorological Data Analysis and Irrigation Planning In Mauritania: Altitude, Climograph, Precipitation, Stations, Sub-humid...29-32

Tomoharu YAMAGUCHI, Genta KANAI, Makoto YOKOTA, Yoshinori KAWAI: Development of Solar Desalination System -Basic Performance of Basin-type Solar Stills Equipped with Evaporation Simulators: Basin-solar still, Evaporation simulator, Radiation absorber, Ultrasonic oscillator...33-36

Robert R. BLANK, James A. YOUNG: Amelioration of Natric Soil Horizons by *Lepidium latifolium*: Calcium, SAR, Sodic soil, Sodium...37-40

Session III

Tsuyoshi MATSUMOTO, S. SINHA, Toshinori KOJIMA, Shigeru KATO, Hiroaki WAKABAYASHI: Study of Salt and Water Movement of Saturated Soil with New Method of Irrigation to Halophytes: Desert greening, Halophytes, Salt accumulation, Water movement...41-44

Yibing QIAN, Zhaoning WU: Causes of Oasis Desertification on the Southern Fringe of the Taklimakan Desert: Cause of desertification, Oasis, The Taklimakan desert...45-48

S. SINHA, T. MATSUMOTO, H. HAMANO, T. KOJIMA: Salt and Water Movement in Desert Plantation: Effect of Distillate Water Produced by Recycled Waste Material: Afforestation, Arid areas, Salt leaching, Solar distillation, Underground irrigation...49-52

Satoru TAKAHASHI, Fumio WATANABE, Hisamitsu TAKAHASHI, Tabarek M. ISMAEL, Kenji FUKUNAGA: Monitoring Soil Temperature under a Stone Mulching System in Djibouti: Desert greening, Djibouti, Soil temperature, Stone mulching system...53-56

Kenneth K. TANJI: Modeling Constituents of Concern in Drain Water Reuse by *Eucalyptus* Trees: Boron, Excel model, Leaf accumulation, Rootzone accumulation, Salts...57-60

Session IV

F.S. NAKAYAMA, D.J. HUNSAKER, J.M. NELSON: Water Management of New Crops for Commercialization in Arid Environments: Guayule, Hesperaloe, Lesquerella, New crops, Water management...61-64

Rupali DATTA, Sanjay KUMAR: Role of Chloroplastic α -Amylase in Drought Tolerance -Changing the Microclimate of Deserts: Carbohydrate metabolism, Maize, Nitrate metabolism, Pearl millet, Stress...65-68

Adrian WILLIAMS, Zahid HUSSAIN, Bob SVENDSEN, Brian FERGUSSON: A model for Future Technolotry Transfer at the 'Grass Roots': Funding, Technology transfer, Training...69-72

Sanjay KUMAR, M. MOHAN, A. GHOSH: Trend of Acidic Deposition and Its Likely Impact in an Arid Area Adjacent to the Great Indian Desert: Acidic deposition, Arid area afforestation, Judhpur, RAINS ASIA model...73-76

Jung Sung YANG, Sanjay KUMAR: Formation of Arid Areas and Destruction of Plant Physiology -Effect of Acidic Deposition: Acidity, Desertification, Plant physiology, Salinity...77-80

Session V

Hiroyuki HAMANO, Shigeru KATO, Tomohiro SHIMIZU, Toshinori KOJIMA, Koichi YAMADA: A Study on Possibility of Bauxite Utilization to Improve Soil Properties for Afforestation of Arid Land: Afforestation, Bauxite, Soil conditioner...81-84

Masahiko TANIGUCHI, Yukuo ABE, Toshinori KOJIMA, Masahiro SATO, Koichi YAMADA, John LAW: Estimation of Present Biomass in Leonora, Western Australia: Biomass, Forestation, Surface runoff...85-88

Thomas LUGASKI: Extinction of Winnemucca Lake, Nevada -A Small-scale Analog of What Has Happened to Similar Desert Lake Basins: Agricultural diversion, Extinct lake, Extinct species...89-92

Mingyuan DU, Taichi MAKI: Local Climate Changes with Oasis Development -Some Observation Results:- Caidamu basin, Local climate change, Oasis development...93-96

Randal J. RISTAU: Intensive Agricultural Production in the Desert Conditions of the San Luis Valley of South-central Colorado: Agricultural pruduction, Irrigation, San Luis valley, Water quality...97-100

Vol. 10 No. 1 (2000) (2000.4.25)**巻頭言**

吉野正敏：沙漠研究の新世代

総説特集：「沙漠化と NGO」

勝俣 誠：沙漠化防止と NGO...1-3

楠田一千代：国際機関からの視点...4-8

壽賀一仁：日本の NGO からの視点...9-15

尾関葉子：アフリカ NGO からの視点...16-20

菊山ひじり：砂漠化に対する女性の取り組み - 西アフリカ・マリの NGO 活動 - ...21-29

楠田一千代：砂漠化と NGO: 国際 NGO , Enda-TM のケース...30-34

深井善雄：NGO と ODA の関わりとその変化...35-39

展望論文

西上泰子・佐野 寛・小島紀徳：沙漠の太陽エネルギーによるグロー バリエバイオメタノール生産 : Solar energy in deserts, Biomass, Methanol synthesis, Tropical forest, Global energy transportation system...41-48

原著論文・論説

Masahiro ETAYA, Toshibumi SAKATA, Sakuji YOSHIMURA, So HASEGAWA: An Experiment on Detecting Remains in the Desert Area of Egypt Utilizing Space-borne SAR data: Egypt, Desert area, SAR, Archaeological survey...49-58

Tarek Hanafy Selim KOTB, Tsugihiro WATANABE, Yoshihiko OGINO, Takao NAKAGIRI: Performance Assessment Framework for Irrigation System Characterization and Comparative Evaluation among Regional Units -Case Study, Egypt's Irrigated Agricultures:- Performance assessment framework, Irrigation system characterization, Irrigated agriculture, Egypt, Potential of water saving...59-74

書評

矢吹貞代：吉野正敏「風と人々」...75-76
杜 明遠：真木太一「中国の食料・環境と農林業（写真で見る）」...
76-77
おあしす【学会報告／会員のページ】...pp.8

Vol. 10 No. 2 (2000) (2000.7.25)

巻頭言

小堀 巍：沙漠に還ろう

総説特集：「乾燥地考古学の回顧と展望」

梅村 坦：「乾燥地考古学の回顧と展望」特集にあたって...79-80
吉村作治：エジプトにおける発掘調査：General survey, Malkata south,

Western valley of the kings, Aristocratic tombs at Qurna, Second solar boat at Giza, Abusir south, Dahshur north...81-89

岡田保良：日本発メソポタミア考古学 - 近年の動向 - : Mesopotamia, Archaeology, Syria, Excavations, Tell taban, Kokushikan university ...91-98

小谷仲男：アフガニスタン考古学遺跡の現状: Archaeology, Afganistan ...99-106

加藤九祚：マルギアナの青銅器時代オアシス集落址 - ツゴロク 21号神殿 遺跡を中心として - : Margiana, Togolok site, Proto-Zoroastrianism, Bronze age...107-115

小島康誉：中日・日中共同ニヤ遺跡学術調査 12 年間の総括と今後 : Joint Sino-Japanese Research, Niya site Xinjiang...117-124

展望総説

藤井秀夫：イラク西南沙漠の自然とヘレニズム期の文化 - アッタール洞窟 , アイン・シャイアのかなーと , 西南沙漠のオアシス群

- : Natural environment of the southwestern desert of Iraq the caves of at-Tar, Unearthed at-Tar cave's textiles, the Hellenistic culture, Qanat water system of Ain Sha'ia, Oases of the southwestern desert, The upper fars formation of the Miocene, Tectonic movement, Aged ground water...125-135

土屋 清：衛星から観測されるデータから求められる植生指数 : Vegetation index, RVI, VIN, NDVI, SAVI, PD54, TSARVI...137-145

原著論文

安部雄征・仲谷知世・桑畠健也・横田誠司：蒸発力を利用した新たな集積塩類除去法 (Dehydration 法) と地表灌漑方式による Leaching 法との比較研究 : Salinization, Leaching, Dehydration, Salts-capturing sheet, Evaporation force...147-156

短報

真木太一・伊藤代次郎・西川 敦・杜 明遠：中国乾燥地トルファンの防風林が微気候と植物葉温に及ぼす影響 - タマリスク防風林を事例として - : Arid land, Leaf temperature, Microclimatic alleviation, Tamarisk windbreak, Wind speed...157-166

資料・報告

濱村邦夫: 乾燥地研究で日本に求められる 3G - 第 6 回乾燥地開発会議の印象 - : Control measures, Dry lands, Genetic manipulation, Geographic information system, Water gathering...167-170

おあしす【学会報告／会員のページ】...pp.20

Vol. 10 No. 3 (2000) (2000.10.25)

巻頭言

三上正男：沙漠から世界へ - 風送ダストプロジェクト -

総説・展望

Masatoshi YOSHINO: Problems in Climatology of Dust Storm and its Relation to Human Activities in Northwest China : Desertification, Dust storm, Kara-bran, Natural hazard, Wind damage...171-181

原著論文

Yaping SHAO, Hua LU :A Simple Model for Dust Emission...183-188
Yuko HATANO, Naomichi HATANO: Aeolian Transport of Particles in

Chernobyl and Application to Dune Morphology: Barchans, Linear dune, Dust chernobyl...189-197

Taichi MAKI, Mingyuan DU: Movement of Sand Dunes and its Prevention by Windbreaks at the Turpan Basin and the Taklimakan Desert in China: Climate, Sand dune, Taklimakan, Turpan, Windbreaks, Wind erosion...199-204

田中俊平・柳澤文孝・小谷 卓 : 山形県山形市および鶴岡市における乾性降下物の化学組成 : Chemical composition, Dry deposition, Yamagata, Tsuruoka, Kosa...205-214

資料・報告

高宮一喜・筒井 晴 : アルゼンチン乾燥地域の農業と水問題: Arid area in Argentina, Irrigation in Mendoza, Land degradation, Salinization... 215-224

堀野治彦・長野宇規・三野 徹 : ニジェール国における水文観測体制と灌既状況 : Irrigation, Desertification, Sudano-Sahelian, Niger river, Recording hydrological data...225-230

小特集：ワークショップ「アジア内陸起源の風送ダストの発生メカニズムと長距離輸送過程」

Sadyo YABUKI, Hideki NAGASHIMA, Masao MIKAMI, Takashi ISHIYAMA: Short Reports – The Workshop on "The Study of the Mechanism of Aeolian Dust Outbreak from Asian Continent and its Long-range Transport" Introduction...231

Masao MIKAMI: Proposal of an International Joint Program on the Evaluation of Aeolian Dust Outbreak from the Continents and its Impact to the Climate...232-234

Masao MIKAMI, Hideki NAGASHIMA, Osamu ABE, Hiroyuki II, Taichi MAKI, Yutaka YAMADA: Field Research in the Dust Outbreak Regions for the Understanding and the Parameterizing of the Dust Erosion Process...235-237

Motoaki YASUI, Kiyoshi TSUCHIYA, Keiji KAI, Toshikazu UEHARA, Takeshi OOTOMO, Tomohiro NAGAI, Kohei MIZUTANI, Jun MIYAMOTO, Akihiko ITO, Masahisa NAKAZATO, Akinori ICHIKI: Observational and Analytical Studies on the Mechanism of the Long-Range Transport of Aeolian Dust...238-245

Sadyo YABUKI, Akihiko OKADA, Masatoshi HONDA, Yutaka KANAI, Yukihiko MATSUHISA, Hikaru KAMIOKA, Fumitaka YANAGISAWA, Masayoshi NAKAWO, Hiroshi SHIMIZU, Hitoshi FUKUSAWA, Akira UEDA, Jun SUZUKI: Physical and Chemical Characterizations of Aeolian Dust Particles from Source Region to Japan..246-252

Taichi MAKI, Masatoshi YOSHINO, Hiroyuki II, Kiyoshi TSUCHIYA, Shigehiko SUGIHARA: Analytical Studies on the Relationship between Land Surface Conditions and Outbreak of Aeolian Dust...253-256

Masaru CHIBA: Numerical Modeling of Aeolian Dust Emission and Long-distance Transport...257-258

おあしす【学会報告／会員のページ】...pp.10

Vol. 10 No. 4 (2000) (2000.12.25)

巻頭言

嶋田義仁：ファミ・ジェネの時代と発電所のダウン・サイジング

展望・総説

藤井純夫: 乾燥地考古学の諸問題: 1. 遊牧民の考古学的可視性: Arid zone archaeology, Archaeological visibility, Rosen-Finkelstein controversy, Pastoral nomads, Sinai and Negev...259-268

邸 国玉・戸部和夫・清水英幸・大政謙次：「国連砂漠化対処条約」に対応した中国政府の基本対策 : China, Combat desertification, Activity and technology, Evaluation...269-273

Koichi KUBO, Hikaru TSUTSUI: Aral Sea Now: Aral sea, Socioeconomic, Environment, Irrigation, Earth dam...275-286

原著論文

児玉香菜子：現代都市モンゴル族の文化変容と社会経済的動態 - 中国内モンゴルにおけるある都市民モンゴル家族の暮らしから - : Modern Mongolian urban life, Acculturation, Inner Mongolia,

Pastoral life, Commercial value of animals, Chinese herder, Trade,
Inter-ethnic networks...287-300

短報

西崎 泰・小島紀徳・山口達明：ピートによる中国カルチン沙地のアルカリ荒漠地の土壤改良に関するコスト計算：Peat, Cost efficiency, Alkalisoil, Product yield...301-308

資料・報告

長野宇規・清水直也・三野 徹：ニジェールにおける住民参加型砂漠化防止の現状 - PASP を例として - : Sahel, Desertification, Soil conservation, Participative approach, Water-harvesting...309-320

おあしす【学会報告／会員のページ】...pp.8