DOWNLOAD PDF THE SACRED ROOT: SAKAU EN POHNPEI MICHAEL J. BALICK AND ROBERTA A. LEE

Chapter 1 : Pacific Island Heritage - PDF

Michael J. Balick Roberta A. Lee chapter six The Sacred Root sakau en pohnpei Sakau, known botanically as Piper methysticum G. Forst., is a species so tightly woven into the traditional practices of Pohnpei that it has become an integral part of Pohnpeian culture, with no palpable boundary between culture and plant.

Kava culture Kava is used for medicinal, religious, political, cultural and social purposes throughout the Pacific. These cultures have a great respect for the plant and place a high importance on it. In Fiji, for example, a formal yaqona kava ceremony will often accompany important social, political, or religious functions, usually involving a ritual presentation of the bundled roots as a sevusevu gift , and drinking of the yaqona itself. It is therefore a slightly stimulating drink which helps relieve great fatigue. It relaxes the body after strenuous efforts, clarifies the mind and sharpens the mental faculties". This is not a literal seizure, but something does change in the processes by which information enters, is retrieved, or leads to actions as a result. Thinking is certainly affected by the kava experience, but not in the same ways as are found from caffeine, nicotine, alcohol, or marijuana. I would personally characterize the changes I experienced as going from lineal processing of information to a greater sense of "being" and contentment with being. Memory seemed to be enhanced, whereas restriction of data inputs was strongly desired, especially with regard to disturbances of light, movements, noise and so on. Peace and quiet were very important to maintain the inner sense of serenity. My senses seemed to be unusually sharpened, so that even whispers seemed to be loud while loud noises were extremely unpleasant. At the beginning conversation comes in a gentle, easy flow and hearing and sight are honed, becoming able to perceive subtle shades of sound and vision. The drinker never becomes angry, unpleasant, quarrelsome or noisy, as happens with alcohol. Both natives and whites consider kava as a means of easing moral discomfort. The drinker remains master of his conscience and reason. Kava beverage has a long history of consumption in the South Pacific and has an important role in traditional community ceremonies. In recent times, it has become more widely consumed as a recreational beverage in both the South Pacific islander community as well as in the wider international community. Within these communities, kava is considered to be a safe and enjoyable beverage, based on a long tradition of use and little evidence of harm. There is little documented evidence of adverse health effects associated with traditional moderate levels of consumption of kava beverage, with only anecdotal reports of general symptoms of lethargy and headaches. Whether this reflects genuine low incidence or an under-reporting of adverse health effects is unclear. Clinical trials examining the efficacy of aqueous extracts of kava in treating anxiety, although limited, have also not identified adverse health effects. On the other hand, there is strong evidence that high levels of consumption of kava beverage can result in scaly skin rash, weight loss, nausea, loss of appetite and indigestion. These adverse health effects, while significant, are considered to be reversible upon cessation of kava use. Other possible effects include sore red eyes, laziness, loss of sex drive and general poor health. No effect on cognition, which might be associated with the pharmacological activity of kava, has been identified. No information is available on the potential for kava beverage consumption to impact on the incidence of chronic disease. Moderate to high kava beverage consumption also produces a reversible increase in the liver enzyme gamma glutamyltransferase GGT , which may be an early indicator of cholestasis. Clinical surveys in Aboriginal communities in northern Australia with a history of heavy kava use have not revealed any evidence of long-term liver damage associated with consumption of kava beverage. The available data indicates that traditional kava beverage prepared from the root has a long tradition of safe use in the South Pacific Islands. It is compositionally different from kava products prepared by extraction using organic solvents. While excessive consumption of the traditional kava beverage may lead to adverse health effects, such as kava dermopathy [see below], there is no evidence that occasional use of kava beverage is associated with any long-term adverse effects. Clinical trials of kava have not revealed hepatotoxicity as a problem. This has been confirmed by further studies evaluating the toxicology of kava drink. Based on available scientific

information it can be inferred that kava as a traditional beverage is safe for human consumption. Between 50 and cases of clinically apparent liver injury have been published or discussed in the literature. Advocates for the herb have strongly rejected these numbers, disputing both their accuracy and the causality assessment process. Still, there seem to be convincing evidence in some cases of severe hepatitis ending in fulminant hepatic failure, requiring liver transplantation, and even leading to death. A number of scientists and medical practitioners criticized the poor quality of the reports by pointing out that most of the reported rare cases of hepatotoxicity involved patients with a history of alcohol or prescription drugs abuse or concomitant use of medicines known as potentially hepatotoxic. More rigorous clinical research has found no evidence of any significant negative health issues including any irreversible liver damage that could be linked to kava. That means that the incident rate of liver toxicity due to kava is one in million patients. It has been reported that combined use of alcohol and kava extract can have additive sedative effects. Kava may have potential additive CNS depressant effects such as sedation and anxiolytic effects with benzodiazepines and barbiturates. Despite numerous studies, the mechanism that causes kava dermopathy is poorly understood "but may relate to interference with cholesterol metabolism".

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Chapter 2 : Sakau: Powerful Plant From the Pacific Islands | HuffPost Life

Michael J. Balick and Roberta A. Lee Sakau, known botanically as Piper methysticum G. Forst., is a species so tightly woven into the traditional practices of Pohnpei that it has become an integral part of Pohnpeian culture, with no palpable boundary between culture and plant.

Tribe puts ban on tampering with wall Media and public interest in the Kaimanawa wall was further developed by Brailsford and the American alternative prehistorian David Hatcher Childress, who gave a joint seminar 11 May at the Auckland College of Education on the ancient megalithic cultures of the Pacific. The Nation of Waitaha in the s continued to receive publicity using alternative prehistory to attract the media and the public to its view of the past. Earthworks found in Northland were identified in the New Zealand and Australian media as the remains of an ancient Waitaha village. Indigenous identity Media and publishing activities helped the Nation of Waitaha to be seen as an authentic indigenous group. Before the settlement, factions from within Ngai Tahu, most notably members who have actual Waitaha ancestry as, in fact, do nearly all Ngai Tahu , and who had discovered a potential strength in alliance with the Nation of Waitaha, argued that their rights would be extinguished under the Bill The Press, 22 May A desire for an authentic indigenous identity also helps to explain the content of Song of Waitaha and the activities of the Nation of Waitaha, which had a potentially large and cosmopolitan membership. Brailsford is quoted in a New Age publication as saying: In a later book, Brailsford who is of European ancestry, claimed direct descent from the founding Waitaha ancestor Rakaihautu. One Waitaha group with links to Brailsford specified that members of Waitaha were those who could conventionally trace their ancestry whakapapa from and through Rakaihautu, in addition to honorary members who could be Maori and Pakeha who were not of Waitaha Waitaha Taiwhenua O Waitaki Trust Board What is perhaps unique to Waitaha was this fusion of disgruntled but genuine groups within Maoridom with non-Maori in the Nation of terra australis 35 12 Geoffrey Clark Waitaha. One example is that some Waitaha claimed an antiquity of 67 generations as in the Song of Waitaha when arguing for their status as a distinct and older indigenous group than Ngai Tahu Otago Daily Times, 17 June ; The Press, 10 July Conclusion The late Michael King , , saw the Song of Waitaha as yet another example of colonialism affecting indigenous cultures through European appropriation and transmutation of the Maori past into synthetic forms. One of the ironies about the views contained in Song of Waitaha for archaeologists and historians is their similarity to ideas found in earlier and longdiscarded scholarship. Hyperdiffusionist explanations of cultural dispersal in the late 19th and early 20th centuries provide a permanent reservoir e. Haast ; Tregear ; Brown , of outdated and discredited ideas that alternative prehistorians will refer to and use e. One explanation for the popularity of alternative prehistories in New Zealand during the s might lie in the changing cultural spaces created by the activities of the Waitangi Tribunal between different sectors of New Zealand society, particularly the new relationships forged between the Crown and Maoridom. The alienation of some non-Maori and Maori from the redistribution-reconciliation process fostered a range of prehistories that proposed the colonisation of New Zealand by, among others, Celts, Phoenicians, Vikings, Chinese and South Americans e. Further, the redistribution of state-owned assets under the Treaty of Waitangi is not warranted because the original inhabitants have been extirpated. Archaeologists and others involved in historical research need to be aware of the content, influences and activities of individuals and groups promoting alternative versions of the past, and mindful of the desire for indigeneity that is frequently embedded in them Goldsmith Acknowledgements I would like to thank Atholl Anderson for access to his Nation of Waitaha file and his pertinent comments on previous drafts of this paper. The opinions and content expressed in this paper are, however, the responsibility of the author alone. Journal of the Polynesian Society An adequate culture nomenclature for the New Zealand area. Hillmorton High School, Christchurch. Personal communication, 17 September Moas and moa-hunting in prehistoric New Zealand. Cambridge University Press, England. The chronology of colonization in New Zealand. The

welcome of strangers. University of Otago Press, Dunedin. Personal communication, October Tuhoe â€" The children of the mist. Transactions of the New Zealand Institute Lords of the soil: The story of the Turehu, the White Tangata Whenua. Their origin, history and culture. The riddle of the Pacific. The histories of a nation. Song of the stone. Lost cities of ancient Lemuria and the Pacific. Adventure Unlimited Press, Illinois. Press, radio and T. The prehistory of New Zealand. Longman Paul, Auckland, New Zealand. Ancient Celtic New Zealand. New Series 2 2: Struggling to be indigenous. Archaeology, tradition, and myth in New Zealand prehistory. Journal of the Polynesian Society 69 4: Address to the Philosophical Institute of Canterbury. Transactions of the New Zealand Institute 4: The quest for origins. Penguin Books, New Zealand. The Penguin history of New Zealand. Essays on Canadian Writing 56 Fall: The travesty of Waitaha: The New Age piracy of early Maori history. Ngai Tahu Sea Fisheries Report. Waitangi Tribunal, Department of Justice, Wellington. Old myths and new politics. Some contemporary uses of traditional history. The New Zealand Journal of History New Spirit August The dynamics of change in South Island oral traditions. Unpublished MA thesis, University of Canterbury. A new age myth: Archaeology in New Zealand 39 3: The Southern Districts of New Zealand. The great New Zealand myth. Reed, Wellington, Auckland, Christchurch. The Lore of the Whare-wananga. Chain of evidence â€" Who were the first humans to visit New Zealand? Kanuka Press, New Zealand. Te Karaka Spring 6â€"7: Willis, Wanganui, New Zealand. Ministry of Commerce Te Manatu Tauhokohoko. New Zealand Archaeological Association. Dating the late prehistoric dispersal of Polynesians to New Zealand using the commensal Pacific rat. High-precision radiocarbon dating shows recent and rapid initial colonization of East Polynesia. The lost world of the Moa. Indiana University Press, Bloomington. New book will reveal secret history of the Maori. The New Zealand Herald, 2 June Pre Maori tribe theory gains support. The Otago Daily Times, 8 May Historian touring South Island promoting new editions of books. The Otago Daily Times, 17 June Subsumption key to Waitaha debate. The Press, 5 November Waitaha make their stand. The Press, 22 May The Press, 19 June Waitaha wins right to challenge settlement. The Press, 10 July Will the real Waitaha stand up? The Press, 10 August Letter to the Editor. The Southland Times, 9 May

Chapter 3 : calendrierdelascience.com: Sitemap

of Pohnpei plants, people, and island culture The Sacred Root: Sakau en Pohnpei Michael J. Balick and Roberta A. Lee Roberta A. Lee chapter six The Sacred.

Noted yibung to be incorrect. Forst indigenous Syn callifolium Blume, Antrophyum ponapense. Lina Lawrence and Elizabeth Augustine noted that the word with the "w" refers to a deeper form of coconut basket, a kiam, not the fern, spring Kyodai shida Miki Fritz spring Reproductive cycle of Selaginella The reproductive cycle of selaginella is shown the illustration below. At the top mature selaginella produces cones. The cones produce two types of spores, one larger than the other. The smaller spore releases swimming sperm, the larger spore contains eggs. Fertilized eggs develop into mature selaginella. The spores carry easily in the wind, allowing selaginella to colonize new territory far from the original plant. Selaginella life cycle Illustration 5: Fern morphology from student presentations Chapter 3 Plants that heal us Why are plants medicinal? One hypothesis as to why plants produce medically active chemical compounds centers on the fact that "plants cannot run. They must defend themselves against being eaten by other means. Powerful chemical compounds that affect animals are thought to be one way in which plants defend themselves. If an animal is poisoned or disabled by a chemical compound in a plant, then maybe the animal will be unable to finish eating that plant. Those same chemical compounds may in more limited quantities be medicinal. Flowering plants angiosperms in particular have developed diverse and unique molecular defenses against herbivores â€" animals that eat plants Sumner, Another hypothesis notes that plants are attacked by viruses, bacteria, and fungi. Plants have to defend themselves against these attackers, but lack a complex immune system such as animals have. Plants have developed a chemical arsenal to kill off attacking viruses, bacteria, and fungi. Some of those same compounds work for animals including humans in fighting off the same microbes. A third theory is applied to some plants. Some plants appear to attract animals intentionally. The plant offers up a relatively expendable part of the plant, in exchange the animals behavior patterns are beneficial to the plant. There is a grass in Africa preferred by elephants. The elephants eat the blades, but never damage the underground portions of the grass. The elephants trample other forms of vegetation that would eventually shade the grass to death. The elephants even intentionally uproot and kill inedible bushes that would shade out their favorite grass. Who is benefiting here? Both the grass and the elephant. The elephant gets fed, the grass gets rid of its competition on the savanna plains of Africa Attenborough, In this theory plants which produced chemical compounds that benefit their benefactor - the animal that is protecting the plant - would be more likely to survive. Why study indigenous peoples and their medicinal use of plants? Indigenous peoples are those descendants of the original inhabitants of a location. Non-indigenous people are those who are not ancient inhabitants of a place. Usually only the indigenous people will know the local plants and their uses. The non-indigenes will likely use commercially prepared products, often based on the plants of their ancient home. Aspirin is based on a compound found in the bark of a willow tree found in Europe, the ancient home of those of European ancestry. Modern day European descendants living in North America have, by and large, forgotten how to produce healing compounds from plants and do not generally know how to use the local plants of North America for healing. Ethnobotany seeks to both document the cultural uses of plants and, in the field of medicinal information, often seeks to learn of new compounds that may be effective in treating diseases. These clues point the way to new discoveries Indigenous populations experiment independently with their native plants across their natural range and frequently discover similar medicinal uses that reflect a common chemical legacy. How do indigenous people view illness and healing? Indigenous people usually have their own view of how their world works. This influences how they see illness, injury, and healing. Their own beliefs and concepts are used to explain the causes and cures of illnesses. A belief in forest elves that play tricks on people could be used to explain an illness. A plant that is seen as protective against the forest elves might be employed as a medicine to cure that same illness. There are also cultural contexts in which care

occurs. In Micronesia, female reproductive system problems are more likely to be treated by female healers. Some plant medicines may be restricted based on the clan of the patient. Who cares for whom and who is cured in what particular way is culturally based. This is covered in more detail in the next section. Healing also involves a process. For example, a treatment may include multiple visits to a healer. A medicine for depression might be administered over a period of four days. The administration may also include conversations with the healer, talk therapy. What is a cultural context? On Pohnpei, Centella asiatica liwadawad marer is a plant used on babies to help reduce fear of hiccups. Hiccups are not considered a disease on Pohnpei, but rather a sign the baby is healthy and growing. On Pohnpei, the only concern is that the hiccups might scare the baby, and fright is considered bad for a baby. The baby should not fear hiccups and Centella asiatica will reduce this fear. In Kosrae, a baby that does not hiccup is considered to be ill and in need of ono in misen tulik medicine for sick child. The medicine is intended to cause the baby to hiccup. In European culture, hiccups are seen as a condition that needs to be cured. There are local plant based medicines such as administering a spoonful of crystallized sap from Saccharum officinarum to cure hiccups. That would be a spoonful of sugar. Whether the condition is something to be cured European view or made less fearful Pohnpei or promoted Kosrae depends on the cultural context. There are also diseases that exist only within a given cultural context. On Pohnpei Soumwahu en eni refers generally to diseases caused by affliction by bad spirits. This is sometimes translated as "ghost sickness. The terms ghost and eni are culturally loaded words with uniquely different meanings and contexts. These illnesses are termed culture-bound syndromes. Their treatment also only exists within the culture. What plants people use and how they use them is important, but knowing why they use them is also important. European based "western" doctors see medicine as being culture independent. Whether or not one believes a particular drug will work in not important to a "western" doctor. Indigenous people use plants within the context of culture. The plant and its application involve biological, cultural, and social interactions for the healer and patient. A massage to treat tense muscles may include a conversation that relaxes the patient. Belief in the efficacy of a treatment is critical to whether the medicine will work. Are not plant medicines family secrets? A distinction has to be made between generally known and widely used cures and privately held healing knowledge. Putting Ocimum tenuiflorum in hot water and breathing the vapors is a widely known remedy for a head cold and nasal congestion on many islands in Micronesia. This is not a secret, and many homes have the plant growing right outside the house for easy access. Many Micronesians know that Morinda citrifolia is used locally as a palliative for diabetes and as a general health tonic. Senna alata is used to treat the same skin fungus across not just Micronesia but throughout the Pacific basin. The above remedies are not privately held secrets. This is commonly held knowledge for widely distributed plants found on many islands. This information is effectively "in the public domain. Working in the forest a Pohnpeian farmer knows that if he cuts himself then the indigenous plant Piper ponapense can be used to stop the bleeding. This activity, however, is also found in Piper methysticum and Piper betel. This activity is common to this genus and the remedy is generally known at the genus level. There are important local medicinal recipes that are carefully guarded family secrets. Some treatments may include chants or special incantations. This knowledge is usually passed along to only one child, and then only over a long course of many years. This type of knowledge should be considered private and be kept that way. In some cases a healer will share the plants that are to be used, but not the process of preparation.

Chapter 4 : Full text of "Journal of ethnobiology."

Michael J. Balick Roberta A. Lee chapter six The Sacred Root sakau en pohnpei S akau, known botanically as Piper methysticum G. Forst., is a species so tightly woven into the traditional practices of.

Transcription 1 2 Terra Australis reports the results of archaeological and related research within the south and east of Asia, though mainly Australia, New Guinea and island Melanesia lands that remained terra australis incognita to generations of prehistorians. Its subject is the settlement of the diverse environments in this isolated quarter of the globe by peoples who have maintained their discrete and traditional ways of life into the recent recorded or remembered past and at times into the observable present. List of volumes in Terra Australis Volume 1: Burrill Lake and Currarong: Lampert Volume 2: White Volume 3: New Guinea Stone Age Trade: The Geography and Ecology of Traffic in the Interior. Hughes Volume 4: Recent Prehistory in Southeast Papua. Egloff Volume 5: The Great Kartan Mystery. Lampert Volume 6: Early Man in North Queensland: Art and Archaeology in the Laura Area. Winter Volume 7: Prehistory and Ecology in Western Arnhem Land. Schrire Volume 8: Hunter Hill, Hunter Island: Archaeological Investigations of a Prehistoric Tasmanian Site. Bowdler Volume 9: Horton Volume The Emergence of Mailu. Irwin Volume Archaeology in Eastern Timor, I. Glover Volume The Lapita Period on Tongatapu and its Relationships. Poulsen Volume Brown Volume O Connor Volume Summerhayes Volume The Prehistory of Buka: Wickler Volume The Archaeology of Lapita Dispersal in Oceania. Vunidilo Volume An Archaeology of West Polynesian Prehistory. Smith Volume The State of the Art. Wallis Volume Barker Volume Population Size or Land-Use Patterns? Attenbrow Volume Veth Volume Pieces of the Vanuatu Puzzle: Archaeology of the North, South and Centre. Bedford Volume Ulm Volume Lithics in the Land of the Lightning Brothers: Clarkson Volume Lapita and Western Pacific Settlement. Connaughton Volume McDonald Volume New Directions in Archaeological Science. O Connor and B. Marwick Volume Colonisation, Seafaring and the Archaeology of Maritime Landscapes. Archaeological Science Under a Microscope: Kirkwood Volume The Early Prehistory of Fiji. Anderson Volume Prebble Volume Kim Dung Volume Archaeological and Biogeographic Approaches to Landscapes. Terra Australis ; Geoffrey Richard , Alexander, Dwight. Apart from any fair dealing for the purpose of private study, research, criticism or review, as permitted under the Copyright Act, no part may be reproduced by any process without written permission. Inquiries should be made to the publisher. Sue O Connor Typesetting and design: Rachel Lawson Cover image: Thevenot by courtesy of the National Library of Australia. Reprinted with permission of the National Library of Australia. Terra Australis Editorial Board: Who is interpreting it, why and how? Hunter-Anderson 17 3 Reinventing tradition: Archaeology in Samoa Unasa L. The past in the present Helene Martinsson-Wallin Is a village a village if no one lives there? Connecting experts in oral histories and archaeology Karen L. Nero Dynamic settlement, landscape modification, resource utilisation and the value of oral traditions in Palauan archaeology David M. Bruce Masse and James Carucci Oral tradition and archaeology: Donations from Palau s businesses and community members also contributed to the conference s success. The editors thank all the people and institutions who supported the Palau conference and this volume. Rita had a strong commitment and passion to preserve the cultural heritage of Palau and she was an inspiration and good friend to fellow Pacific Islanders and foreign researchers. Rita began her career in cultural preservation as an archaeological surveyor under Palau s Historic Preservation Program in After earning her MA in archaeology at La Trobe University in Australia in , she returned to Palau to become the National Archaeologist, overseeing all archaeological work in the Bureau of Arts and Culture and for the Republic of Palau. At the time she was one of a small but steadily growing number of indigenous archaeologists working in the Pacific. Rita performed a number of key surveys during her tenure as National Archaeologist, identifying hundreds of significant cultural sites, and assisted the National Registrar to collect information for the Palau Historical and Cultural Advisory Board. The archaeological data obtained was vital in protecting significant historical properties and many new sites

are known as a result of her detailed recording of cultural properties affected by development projects. Rita also provided invaluable assistance to foreign archaeologists in their academic endeavours and to major infrastructure works such as the Compact Road and Capital Relocation Projects. Rita was passionate about speaking to Palau s youth, endeavouring to instil in them a desire to safeguard their heritage. She taught at the Palau Community College and encouraged students to serve as the nation s next generation of archaeologists and historic preservation experts. Rita wanted to showcase Palau s traditional lifeways and unique natural and cultural heritage at the Pacific Island archaeology conference, but tragically passed away just months before the conference. She was a driving force in making cultural heritage a community and national issue. Her enduring contribution is the preservation of Palau s culture, history and prehistoric sites for future generations. Relevance and engagement was held in the Republic of Palau from 1 3 July in and was attended by more than local and international participants. The conference assessed how Pacific Islander culture is integral to preserving and protecting the natural and cultural resources of Oceania as both are currently threatened by rapid economic, social and environmental changes. The tropical Pacific Islands have only a small number of listed properties, with many major islands and archipelagos underrepresented. At the national level, cultural properties are often outnumbered by natural parks and protected marine and forest environments. The focus of the conference was therefore on community engagement in cultural heritage preservation and management. Under rapid economic development, the social effects of globalisation and the nascent impacts of climate change, communities and governments in the Pacific Islands will need to protect their heritage by marshalling specialised resources at home and abroad and increasing community involvement in cultural and natural site preservation. Such an approach reinforces a necessary and productive union between natural and cultural resource management, which allows the views and expertise of community stakeholders to be combined appropriately with the knowledge of academics, scientists and heritage professionals.

Chapter 5 : Ethnobotany of Micronesia: A course companion

"Ethnobotany of Pohnpei examines the relationship between plants, people, and traditional culture on Pohnpei, one of the four island members of the Federated States of Micronesia.

The largest number are grown in the Republic of Vanuatu, and so it is recognised as the "home" of kava. Kava is a cash crop in Vanuatu and Fiji. The kava shrub thrives in loose, well-drained soils where plenty of air reaches the roots. Too much sunlight is harmful, especially in early growth, so kava is an understory crop. Kava cannot reproduce sexually. Female flowers are especially rare and do not produce fruit even when hand-pollinated. Its cultivation is entirely by propagation from stem cuttings. Traditionally, plants are harvested around four years of age, as older plants have higher concentrations of kavalactones. After reaching about 2 m height, plants grow a wider stalk and additional stalks, but not much taller. Strains and origins This section does not cite any sources. Please help improve this section by adding citations to reliable sources. Unsourced material may be challenged and removed. October A painting showing women preparing kava One of the most potent strains is called "Isa" in Papua New Guinea, and also called "Tuday" in Hawaii. In Vanuatu, it is considered a type of "Tudei" kava, pronounced as "two-day" because it is said to have effects lasting two days due to its chemical profile being high in the kavalactone dihydromethysticin. The plant itself is a strong, very hardy, fast-growing variety with multiple light to dark green stems covered with raised dark spots. In Vanuatu, exportation of kava is strictly regulated. Only strains they deem as "noble" varieties that are not too weak or too potent are allowed to be exported. Only the most desirable strains for everyday drinking are selected to be noble varieties to maintain quality control. In addition, their laws mandate that exported kava must be at least five years old and farmed organically. In Vanuatu, Tudei two-days kava is reserved for special ceremonial occasions and exporting it is not allowed. In Hawaii, there are many other strains of kava. This sacred variety was so important to them that no one but royalty could ever experience it, "lest they suffer an untimely death". Emerson and quoted by Handy and Handy. The day of revealing shall see what it sees: Pukui and Elbert translated this as "a knowledge from kava offerings". Other strains are found in Fiji, Tonga, and Samoa. Kavalactone content is greatest in the roots and decreases higher up the plant. The mature roots of the kava plant are harvested after a minimum of four years at least five years ideally for peak kavalactone content. Kava root is classified into two categories: Crown roots are the large-diameter pieces that look like 1. Lateral roots are smaller-diameter roots that look more like a typical root. Kava lateral roots have the highest content of kavalactones in the kava plant. A total of 18 different kavalactones or kavapyrones have been identified to date, at least 15 of which are active. Inhibition of the reuptake of norepinephrine by kavain and methysticin and possibly also of dopamine by kavain and desmethoxyyangonin. Agonism of the CB1 receptor by yangonin. Monoamine oxidase B reversible inhibition by all six of the major kavalactones. Other effects include significant reduction of the inhibitory effects of muscimol a GABAA receptor agonist in the solitary nucleus of the brain stem of rats by "kavalactones or dihydrokavain" , and elevation of dopamine levels in the nucleus accumbens of rats by high concentrations of kavain and desmethoxyyangonin. Traditionally, it is prepared by either chewing, grinding or pounding the roots of the kava plant. Grinding is done by hand against a cone-shaped block of dead coral; the hand forms a mortar and the coral a pestle. Pounding is done in a large stone with a small log. The product is then added to cold water and consumed as quickly as possible. The extract is an emulsion of kavalactone droplets in starch and buttermilk. The taste is slightly pungent, while the distinctive aroma depends on whether it was prepared from dry or fresh plant, and on the variety. The colour is grey to tan to opaque greenish. Kava prepared as described above is much more potent than processed kava. Chewing produces the strongest effect because it produces the finest particles. Fresh, undried kava produces a stronger beverage than dry kava. The strength also depends on the species and techniques of cultivation. Many find mixing powdered kava with hot water makes the drink stronger. In Vanuatu, a strong kava drink is normally followed by a hot meal or tea. The meal traditionally follows some time after the drink so the

psychoactives are absorbed into the bloodstream quicker. Traditionally, no flavoring is added. In Papua New Guinea, the locals in Madang province refer to their kava as waild koniak "wild cognac" in English. Fijians commonly share a drink called grog made by pounding sun-dried kava root into a fine powder, straining and mixing it with cold water. Traditionally, grog is drunk from the shorn half-shell of a coconut, called a bilo. Grog is very popular in Fiji, especially among young men, and often brings people together for storytelling and socializing. Drinking grog for a few hours brings a numbing and relaxing effect to the drinker; grog also numbs the tongue and grog drinking typically is followed by a "chaser" or sweet or spicy snack to follow a bilo. Kava culture Kava is used for medicinal, religious, political, cultural and social purposes throughout the Pacific. These cultures have a great respect for the plant and place a high importance on it. In Fiji, for example, a formal yaqona kava ceremony will often accompany important social, political, religious, etc. Sleep is often restful and pronounced periods of sleepiness correlate to the amount and potency of kava consumed. Kava drinkers are often perceived as having lazy days after consumption of kava the night before, which can be expected as many active kavalactones have half lives of approximately 9 hours. A journal article titled ""Kava: Kava is known for having a sleep inducing affect and is good for common restlessness and more serious insomnia. A number of scientists and medical practitioners criticized the poor quality of the reports by pointing out that most of the reported rare cases of hepatotoxicity involved patients with a history of alcohol or prescription drugs abuse or concomitant use of medicines known as potentially hepatotoxic. That means that the incident rate of liver toxicity due to kava is one in million patients. Yet, based on a retrospective study in Germany, the alkaloid pipermethystine is an unlikely cause for the observed hepatotoxicity, as, although it occurs in qualities up to 0. Three possible mechanisms for kavalactone hepatotoxicity have been theorized: Alcohol It has been reported that combined use of alcohol and kava extract can have additive sedative effects in mice. But separately kava has been shown to induce sedation. In these studies, heavy kava use in an Aboriginal community in Arnhem Land was associated with overall poor health, a puffy face, scaly rash, and a slight increase in patellar reflexes. Fiji, Samoa, Tonga and Vanuatu argued that the ban was imposed with insufficient evidence. In Health Canada issued an order prohibiting the sale of any product containing kava. The importation and licensing of kava is prohibited in Western Australia.

Chapter 6 : Prokinetic activity of an aqueous extract from dried - calendrierdelascience.com

Get this from a library! Ethnobotany of Pohnpei: plants, people, and island culture. [Michael J Balick;] -- "Ethnobotany of Pohnpei examines the relationship between plants, people, and traditional culture on Pohnpei, one of the four island members of the Federated States of Micronesia.

It is seen from Table 1 that among the six diarylheptanes. Journal of Ethnopharmacology â€" Prokinetic activity of an aqueous extract from dried immature fruit of Poncirus trifoliata L. Rutaceae PF-W are used as a traditional Korean folk medicine for the treatment of digestive dysfunction. The effect of PF-W on gastrointestinal GI motor function was investigated by examining its effect on the serum concentration of orally administered ranitidine, a putative indicator of GI motility, in human subjects. In rat studies, PF-W had no effect on the apparent permeability of ranitidine across the jejunum or the gastric emptying rate GER of phenol red. However, the transit time for charcoal in the intestine was significantly increased by the PF-W pretreatment. The above results are consistent with the hypothesis that PF-W has a unique prokinetic activity, which accelerates the transit of intestinal contents, but has no effect on the GER. Rutaceae ; Prokinetic activity; Intestinal transit; Gastric emptying; Ranitidine 1. Rutaceae , which is widely used as a remedy for digestive diseases, allergic and chronic inflammatory diseases in Korea Kim et al. PF continues to occupy an important place in traditional oriental medicine and is usually prescribed for patients at single doses of 2â€"75 g. Increased mucin release Lee et al. In Korea, PF extracts are used in some over-thecounter drugs for the treatment of a variety of gastrointestinal GI disorders. Nevertheless, little is known concerning its effect either on GI motility or on the GI absorption of drugs. Involved among the 50 chemical components, present in PF, are limonene, linalool, hesperidin, neohesperidin, naringin, poncirin, umbelliferone, auraptene, imperatorin, and synephrine Kim et al. However, no prokinetic activity has been reported for these components. In the present study, the effect of an aqueous extract of PF PF-W on GI motor function was investigated by measuring the in vivo GI absorption of ranitidine in human subjects, the in vitro permeability of ranitidine across the small intestine in rats, and the in vivo gastric emptying rate GER and intestinal transit rate ITR in rats. Ranitidine was selected as a model drug to provide information on GI motility since it is absorbed from the entire region of the small intestine. Plant materials and extract preparation 2. Two kilograms of PF was boiled in 30 l of distilled water for 2 h, and the aqueous extract was filtered, concentrated in vacuo, and lyophilized to give a powder. The yield of the extract was about Louis, MO were used in this study. Sodium carboxymethyl cellulose Dong-A Pharm. Other reagents used were of analytical grade or better, and were used without further purification. Hesperidin is one of the representative flavanone glycosides in the edible portion of many species of citrus fruits including PF and is known to have some beneficial nutritional and pharmacological effects such as cholesterol-lowering, anti-carcinogenic, and anti-inflammatory activities Aturki et al. The mobile phase, a mixture of 20 mM ammonium acetate buffer pH 3. Male Spragueâ€"Dawley rats weighing â€" g and ICR mice of either sex weighing 21â€"30 g were used in the study. The institutional guidelines for the care and use of laboratory animals were followed throughout the study, and approval for the research protocol was obtained from the institutional committee of Seoul National University for animal research. Animals were deprived of food for 20 h before experimentation but were allowed free access to tap water. Subjects Six healthy nonsmoking male Korean volunteers, ranging in age from 23 to 28 years mean They had a normal history, and passed a routine physical examination and laboratory tests. They had no access to other drugs or alcoholic or caffeine-containing beverages for at least 1 week prior to and during the study. Single oral dose toxicity of PF-W in mice This study was carried out according to the guidelines and methods for the safety tests of the drugs provided by the Korea Food and Drug Administration. An aqueous solution of PF-W was administered intra-gastrically to mice through an orogastric tube at various PF-W doses i. Five mice were tested for each dose and each gender, and thus a total of sixty mice male 30, female 30 were used in this test. Each dose group was carefully observed for overt clinical signs and mortality at hourly intervals for 5

h after the dose, and then on a daily basis for 14 days. Individual body weight was measured before dosing and on days 1, 3, 7, and 14 after the administration of PF-W. On day 14, the last day of observation, all animals were euthanized under ether anesthesia and necropsied with special attention to all vital organs and tissues. In vivo bioavailability of ranitidine in human subjects The effect of PF-W on the gastrointestinal absorption of ranitidine was examined in six human subjects in a randomized, two-way cross-over study. There was a washout period of two weeks between the doses. Ranitidine was administered orally at a dose of mg i. The PF-W pretreatment involved the oral administration of 10 g of PF-W with ml of tap water 30 min prior to the administration of ranitidine. For the control group, ml of tap water without PF-W was administered in a similar manner. All subjects were fasted for 12 h before the experiment and for 6 h after the oral administration of ranitidine. The subjects were not allowed to remain in a supine position or to sleep during the experiments for up to 12 h. At 6 h after the administration of ranitidine, all subjects were given tap water and a standardized meal. Serial blood samples 8 ml were collected from the forearm vein via an i. Serum concentrations of ranitidine were measured by an HPLC method, as previously described Lee et al. The resulting supernatant 1. Louis, MO at room temperature. The mobile phase was delivered at a flow rate of 0. Noncompartmental pharmacokinetic characteristics were derived by standard methods. The area under the serum concentration of ranitidine AUC from time 0 to the last sampling, AUC 0,last , was calculated by the trapezoidal rule. The maximum serum concentration Cmax and the time of its occurrence Tmax for ranitidine were compiled directly from concentrationâ€”time data. In vitro permeability of ranitidine across the rat jejunum The diffusion of ranitidine across the rat jejunum was measured according to a previously described method Lee et al. Rat jejunums were removed from three rats, following fasting for 20 h and sacrificed by cervical dislocation. After immediately washing the jejunum with cold pH 7. Six segments, each approximately 1. HBSS 2 ml was added to each compartment of the Ussing chamber and the solutions were gassed with an O2: Five hundred microliters aliquots were withdrawn from the serosal side at 30, 60, 90 and min after the addition of ranitidine, replaced with an equal volume of fresh HBSS, and assayed for ranitidine according to the above HPLC method. Experiments without pretreatment with PF-W served as controls. Nine segments were employed in each of the test and control experiments. The apparent permeability coefficient Papp of ranitidine was calculated using Eq. In vivo gastric emptying rates of phenol red meals in rats The GER was determined in rats by measuring the disappearance of phenol red from the stomach according to a previous method Martinez et al. Aqueous solutions of various PF-W concentrations were administered intra-gastrically to conscious rats to yield various PF-W doses 0, 0. After 30 min, 1. The intra-gastrical administration was performed using an orogastric tube. Ten rats were tested for each PF-W dose. At 20 min thereafter, the rats were sacrificed by cervical dislocation, the abdominal cavity was opened, the H. The stomach was placed in ml 0. The suspension was allowed to settle for 1 h at room temperature, and 5 ml of the supernatant was then added to 0. The supernatant was mixed with 4 ml of 0. The phenol red recovered from the animals that had been killed immediately after the administration of the methyl cellulose solution was used as the control i. The GER in the min period was calculated according to Eq. In the administration, orogastric tubes were utilized. Fifteen rats were tested for each PF-W dose. At 30 min after the administration of charcoal meals, the rats were sacrificed and the transit front of the charcoal meals in the small intestine was detected visually. Data from animal studies were evaluated by an analysis of variance ANOVA followed by Turkey test as a post hoc analysis, if appropriate. Separation of hesperidin by reversed phase HPLC. Arrows indicate the hesperidin peaks, and the numbers above the peaks show their retention times. Acute toxicity of PF-W in mice 3. A nearly identical increase in body weight was observed for all the mice regardless of the dose of PF-W, with a slightly larger increase for male mice. No abnormal findings were evident from the necropsy on the 14th day. The identification of the hesperidin peak in the chromatogram of PF-W was made by comparing its retention time Effect of PF-W on the in vivo gastric emptying of phenol red meals in rats Fig. Serum concentrationâ€”time profiles of ranitidine in human subjects following an oral administration of ranitidine at a dose of mg one tablet of Zantac. Human subjects were fasted from 12 h before and until 6 h

after the administration. Each vertical bar shows the SEM of six subjects.

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Chapter 7 : Project MUSE - Ethnobotany of Pohnpei

Balick, Michael J. Ethnobotany of Pohnpei: The sacred root: sakau en Pohnpei / Michael J. Balick and Roberta A. Lee; Traditional medicine, Pohnpei, and its.

Contributors control their own work and posted freely to our site. If you need to flag this entry as abusive, send us an email. In the remote rainforest, a conflict between two villages developed, with warriors on both sides plotting their grand battle. One village would prevail, the other would be decimated. But then a chief from one village walked to the hostile territory with outstretched arms, holding a leafy green plant for all to see. Squeezing its clear sap into a gourd, he offered it to the warriors readying their weapons; they drank from the vessel. He then sat down with them -- and within a short time, thoughts that needed to be spoken were expressed, the tension dissolved, and young lives were spared. The movie ended, the audience walked out of the theater, with some commenting about the lessons of this fantasy. My research--my laboratory--is currently found in the native and cultivated forests of this vast region, some tiny islands situated in an area of ocean the size of the Continental United States. Each year our team--local and international researchers--spends months collecting the native flora on these islands, evaluating its rarity and learning of how these botanical treasures have made life possible for past and present generations living in this rugged and remote environment. Native plants have long been sources of food, construction material, fiber, and medicine for Micronesians--it is a fascinating place to explore and learn. On the island of Pohnpei, the most powerful and important plant is known locally as Sakau. It is a shrub distantly related to the vine that produces black pepper, but its qualities are far more complex and profound. Bite on the root and it tastes somewhat peppery, with a numbing quality; people place the leaves of the plant on an area stung by a stingray to dull the pain. The plant contains chemical compounds called kavalactones, some of which have powerful physiological properties. Of the 18 kavalactones identified in Sakau botanically known as Piper methysticum G. Forst six are thought to be responsible for its impact on humans. Traditionally, the roots are pounded, releasing a kavalactone-containing liquid, which is mixed with other substances, and consumed. Drinking the bitter root extract is an acquired taste, but the effects are quite pleasant--mild euphoria, amicability and greatly reduced anxiety. It is also a muscle relaxant, with larger quantities resulting in a lack of motor coordination--so moving around is not suggested, but the mind remains crystal clear. Clinicians have studied the ability of Sakau or kava as it is more commonly known in the Pacific and the rest of the world to reduce anxiety in humans--a condition that affects tens of millions of people in this country annually--and found it to be successful and comparable in efficacy to more conventional therapies. Adverse events such as liver damage have been reported, particularly when the kavalactones are consumed in a very highly concentrated form, or when mixed with pharmaceuticals or alcohol. However, when used traditionally as the pure extract derived from fresh roots, mixed with water and consumed, we have not been able to identify this problem. Overconsumption of the beverage does bring a change in the skin, producing a scaly texture, which disappears when drinking is suspended. In Germany, where physicians are trained to prescribe both pharmaceutical and herbal medications, Sakau is recommended for the treatment of anxiety, stress and restlessness. One clinical study compared the use of a daily Sakau supplement containing mg of kavalactones with a control group, and found significant improvement in anxiety in the people taking this herb after 8 weeks. I recommend that a person interested in investigating the use of this plant for their own health conditions do so only under the supervision of a trained health care professional, such as an integrative physician who combines conventional approaches to healing with evidence-based complementary therapies, including well studied herbal remedies. Sakau kava tinctures and teas can usually be found in your local health food store under various brand names. Note that the tea should not be made with extremely hot water, as the kavalactones are thought to degrade with high heat. The beverage promotes social interaction, in the same way as that first glass of wine at a dinner party. Sitting around the Sakau root-pounding stone, one is impressed by how this plant brings the community together, with people reporting

that it is hard to be angry at anyone while drinking this beverage. Thus, when there is a quarrel to be resolved, the chiefs are notified, presented with the plant, and they must mediate a ceremony in which people discuss their conflict and the offending party asks to be pardoned for their transgression. The plant used in the reconciliation ritual even carries a special name--Sakau en tomw--and is used to ask forgiveness for any insult or problem between individuals, families or clans. The plant used in a second round of drinking is called Sakau en kasohralap--to erase the problem from memory, stating "what is forgiven is forgotten now. Sakau, understandably, occupies the most sacred and respected position in the traditional life of this tropical Micronesian island. It is the botanical and cultural bond that holds the people together, ensuring respect for each other, their traditional leaders, their environment and their ancient lifestyle. We are currently studying its effects on laboratory animals, hoping to understand how the herb can influence social behavior and perhaps eventually shed light on related human health conditions that are so problematic in modern society today. Plants, People and Island Culture

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Chapter 8 : Kava - Wikipedia

This course companion is the direct result of the work of Dr. Michael Balick of the New York Botanic Garden. Some of the notes are based on lectures that were originally built from material in Plants, People, and Culture: The Science of Ethnobotany, Michael J. Balick and Paul Alan Cox.

Additional Information In lieu of an abstract, here is a brief excerpt of the content: The power of sakau in defining Pohnpeian culture and daily life isperhapsoneofthebestexamplesoftheextraordinaryinfluence ofasingleplantspeciesonapeopleandtheiridentitytobefound intheMicronesianregion. OnPohnpei,wahu respectorhonor is the historic and contemporary foundation that defines its culture , society, and people. Sakau is ultimate respect, higher than the highest paramount or oratory chief or any other living being in the societyâ€”and even higher than the most importantoftheancestralspirits ,bothgoodandevil. Based on an index of the identified cultural influence ICI 1 of species developed by Garabaldi and Turner, involving criteria such as intensity of use, linguistics, role in narratives, ceremonies or symbolism, persistence of use ethnobotany of pohnpei inthefaceofculturalchange,levelofuniquepositionintheculture,anditsuseas a trade item for resource acquisition outside of the territory, sakau would receive the highest score possible. This chapter explores the botany, ethnobotany, ethnomedical practices, and ethnopharmacologyofsakauandpresentsanintegratedperspectiveofthisplant based in part on interviews with local historians, chiefs, knowledgeable elders, religiousleaders,andobserversofthePohnpeianscene. Weprovidedataonconsumption patterns in Pohnpei based on a survey of people during , revealing a very high rate of use by both men and women. ThePacificElixir, by Lebot et al. While this comprehensive treatment of many aspects of sakaudoesprovideageneralintroductiontoitsclassification,chemistry,anduse on Pohnpei, the aim of this present chapter is to provide the Pohnpeian perspective on this important species. Botany Piper methysticum is a much-branched, somewhat succulent shrub that can ultimately grow 5â€”6 m ca. It has ten to fifteen or more upright branches that spread 2â€”4 m ca. As the plant ages, the stems can reach 10 cm ca. The leaves are heart shaped, suborbicular-ovate to 25 cm ca. The inflorescences are solitary spikes growing to 7. The part of greatest interest is the roots, which are stout brown structures that when split open are yellowish in color Fig. The plant grows well in the upland forests, but due to a significant demand for the roots, a great deal of upland forest has been destroyed over the past few decades, resulting in an erosion of the watershed area on this small island. Therearemanylocalvarieties cultivars ofkavafoundthroughoutthePacific, where it is used as a beverage. Fiji has eleven cultivars of kava, Tonga has eight You are not currently authenticated. View freely available titles:

Chapter 9 : calendrierdelascience.com: Sitemap

Michael J Balick Roberta Lee While formally and informally recognized as being central to community action, the research and theoretical literature provide little insight into the processes behind.