



KAVA A REVIEW OF THE NEW ZEALAND MARKET





Kava: A review of the New Zealand market

MARKET BRIEF

ABOUT THIS PAPER

This market brief has been prepared by the Pacific Trade Invest New Zealand.

This report examines the market for kava in New Zealand and aims to give Pacific Island exporters and other interested parties an overview of the New Zealand market; key market trends; market requirements; and market opportunities.

KEY WORDS: kava, Pacific Islands, New Zealand, market research, trade, export, functional beverage.

DISCLAIMER

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About kava

Piper methysticum is a member of the family Piperaceae (pepper). As with many other South Pacific crops, it is propagated vegetatively. According to Dr Vincent Lebot, the most reliable available evidence indicates that kava originated in Melanesia (probably modern Vanuatu), where it has spread throughout the Pacific. Numerous cultivars of kava exist, each with its own growing requirements, appearance, psychoactive properties and even flavour.

Piper methysticum is the scientific name for 'kava' a word of Tongan origin that has come to be the most frequently used international name for the drink. Within the Pacific Islands there are many names used that can differentiate noble varieties in each of the Kava producing countries, as there are various usages of the drink that are linked to local cultural practices, varieties of the plant and effects of the terroir.

Below is a non-extensive list:

Fiji: yaqona

Hawai'i: 'awa, 'ava Kosrae: seka

Marquesa: kava-kava

Niue: kavainu

PNG: at least 37 names, including ka, wati and in the Western Province sika, saka

Pohnpei: sakau Samoa: 'ava'ava

Tahiti: 'ava, 'ava 'ava, evava

Vanuatu: at least 30 local names including maloku, malohu, gea

(Bank Islands), gi (Torres Island)

Traditionally, kava is a beverage prepared from the either dried or the green main stump or rhizome, peeled basal stems, and unpeeled roots, crushed and strained through water (The National Quality Standard of Export, Vanuatu). Its effects are sedative, soporific, and relaxing, providing a sense of calm and clear-headedness without the excitability, euphoria, or loss of inhibition that accompany alcohol consumption (Aporosa, 2015).

In order for the roots to be ready for use as kava, they must be carefully cleaned and dried. It is imperative to properly dry kava in order to prevent the growth of mould and the potential presence of aflatoxins (Rowe, 2012). Kava quality is cognisant of the use of noble varieties and the preparation process. The ability to distinguish between quality product and tudei (cultivars producing longer, less desirable effects) or other varieties is important.

Kavalactone can also be extracted using an ethanol, acetone, or water solution for use in therapeutic supplements. The use of the non-water extract has been at the centre of health concerns and will be discussed further below, however, the inclusion of



kava in nutraceuticals represents one of the largest potential growth markets. The use of non-water solvents reportedly optimizes the kavalactone extraction yield, often resulting in higher concentration of these active compounds, but also other potentially less desirable flavokavains and alkaloids.

For instance, the abundance of flavokavains A and B in the ethanolic kava preparation was reported to be about 100 times higher than in the traditional aqueous kava preparation (Bian, 2020). In terms of yield, there seems to be a consensus that acetone is the best solvent for the extraction of kavalactone compounds, followed by ethanol, and finally water (used in traditional preparation and some nutraceuticals).

Each of the 19 different kavalactones isolated from kava, have a different physiological effect (Celentano et al 2019), while six are considered responsible for 96% of the pharmacological activity. These are classified as the major kavalactones, while the others (a number increasing as further studies are completed) are minor.

The efficacy of kava is attributed to the synergistic effects of several kavalactones. In defining a kava cultivar's chemotype, the proportion of the six major kavalactones is listed in decreasing order. The kavalactones are then numbered and used to determine the kavalactone profile/chemotype of a kava cultivar. In general, over 70% of the total kavalactone content is made up of the first three kavalactones. The first three kavalactones of a particular chemotype are therefore of particular interest to traders and producers.

This qualitative system of tracking kava is effective because kavalactones are genetically controlled, which ensures that kavalactones are preserved through successive generations of cultivars. Kava cultivars in Vanuatu

are classified into four groups: noble, medicinal, two-day (also known as *tudei*), and *wichmannii*. Among these cultivars, only those classified as noble kava are approved for export (The Kava Act, Vanuatu, 2002). This restriction is the result of the fact that the effects produced in the user may vary greatly, and noble cultivars produce a more rewarding and safer experience. A high kavain content, in particular, makes noble kava more effective in providing anxiolytic effects, whereas dihydromethysticin-forward cultivars (tudei) produce more overpowering and/or unpredictable effects, including nausea and headaches that can last for several days.

Kava-flavoured lollipops, cocktails, vape cartridges, chocolates, and a variety of other value-added kava consumable products are currently available in the United States, but not in New Zealand or Australia. Despite the fact that this represents a potential future industry, caution should be exercised as long-term effects of these products have yet to be determined (AddictionResource, 2019).

	Kavalactone name	Attributing Effects
1	Demethoxyyangonin	MAO B Inhibitor/ Dopamine Booster
2	Dihydrokavain	Relaxing/Sedative
3	Yangonin	Stimulating/Creative
4	Kavain	Happy/elevated
5	Dihydromethysticin	Sedating/long-lasting
6	Methysticin	Pain-relieving

History

There is no doubt that kava is one of the most important crops cultivated in the Pacific. Over the past 3,000 years, it has been an integral part of rites and traditions in Pacific Island nations, used for everything from celebrating a baby's birth to grieving a loved one's death, as well as in traditional medicine (Aporosa, 2015).

Researchers believe that it originated in northern Vanuatu, along the early migration and trade routes around the Pacific, reaching Papua New Guinea in the west, Hawaii in the east, and New Zealand Aotearoa in the south, where it failed to grow (Lebot and Levesque, 1989).

A historical reference states that Dutch navigators named Le Maire and Schouten saw kava on Wallis and Futuna in 1616 (Kalmwith Kava, n.d.). The voyages of Captain James Cook to the South Pacific most certainly included the encountering experience of kava. In the Natural History Museum in London, England, there is a botanical drawing of kava dating back to 1769. Later, George Forster, a naturalist, journalist, and revolutionary who accompanied his father, also a renowned naturalist, on many scientific adventures including Captain James Cook's second Pacific voyage, described kava in detail: "Kava juice is extracted from the roots of a kind of peppertree. The roots are first made into pieces and then are chewed by people who later spew out the pulp into a bowl containing coconut or cold water. After this, the mix is filtered through the coconut fibers and then emptied into a separate bowl for consumption."

Many island nations, such as Pohnpei (Micronesia), Vanuatu, Fiji, Tonga, and Samoa, retain much of their traditional use of kava, while other areas, such as Te Au Maohi (the greater Rarotonga group of islands), French Polynesia, and Hawaii, have reduced or eliminated the use of kava altogether due to colonial contact and influence of missionaries.

Kava exposure varies significantly depending on the dosage range, frequency of administration, and, perhaps most importantly, the preparation method and therefore the chemical composition of kava products (Bian, 2020). Consequently, these variations can be expected to result in a variety of safety profiles. Historically, there have been limited safety disputes surrounding traditional kava use. A small number of cases of hepatotoxicity have been reported in Western countries since the late 1990's and early 2000's. As a result of these adverse events, kava was banned as a herbal anxiolytic drug in Germany between 2002 and 2014 (Kuchta, Schmidt, & Nahrstedt, 2015).

An advisory was also issued in March 2002 by the U.S. Food and Drug Administration (FDA). There are a number of hypotheses regarding the causes, including the use of low-quality cultivars, the adulteration of non-root parts of the plants, the improper handling and storage of kava materials, the possibility of drug-herb interactions, kava overdosing, and others. There has been no validation of any of these proposals, as the products associated with the purported cases have never been accurately identified (Schmidt, 2014).

The hepatotoxic potential of kava is therefore suggested as an idiosyncratic phenomenon. The World Health Organization concluded in 2007 that drinking kava as a beverage does not cause irreversible, long-term health complications. This finding led to the German courts overturning the longstanding ban on kava imports in 2015, however approval was again withdrawn in 2019 when it was determined that there was a lack of data on the anxiolytic effects (Thomson and Schmidt, 2021).

Cultural Practices

In Fiji, dried kava root is traditionally presented to the village head when visiting a village.

On accepting the kava root, the villagers prepare the kava drink in a large wooden bowl (tanoa). In the first instance, the first bowl of the kava beverage is served to the highest-ranking chief of the village. Other village heads take turns before it is offered to everyone else.

There are more kava varieties in Vanuatu (80) than anywhere else in the world. Kava is often consumed at local kava bars, called 'nakamals', and drunk while standing. Unlike some of the other Pacific Islands, drinking kava is usually a solitary practice. It is common for men to share kava with their neighbours, sometimes as a

means of resolving disputes between them. Traditionally, it is common in Vanuatu to drink kava at births, marriages, and deaths, as well as to offer it as a gift to the ancestors. In addition, kava is considered to be a gateway to the supernatural world and used in ritual ceremonies (Corcuran, 2008).

In Tonga's informal kava drinking practices, kava is served in rounds with those sitting farthest away receiving first service from the 'tou'a,' an unmarried young woman (traditionally, women are not permitted to participate in kava drinking) (Lemert, 1967). Refilled bowls of the kava beverage served are passed around until everyone has drunk. Men must sit cross-legged throughout the ritual, and often discuss politics and sports, play



Kava Ceremony, Fiji (Source: Wkimedia Commons)

Media in 19th Century New Zealand displayed an anthroplogical interest in kava. (Source: Heritage Images Online, Auckland Libraries.)

guitar, and sing until the next round of drinking begins. Informal kava drinking can last up to eight or nine hours. The rules of formal kava ceremonies differ from those of informal drinking rituals. Rather than a tou'a, the male chief distributes kava by calling the first participant, with a servant delivering the kava between the parties, and so on until all the participants have completed the ceremony.

In the Pacific diaspora communities around the world, kava consumption is becoming increasingly prevalent and has introduced kava to a new generation of non-Pasifika kava drinkers, who use the substance primarily for recreational purposes; for relaxation and/or medicinal purposes, as a means to reduce anxiety and facilitate sleep.

However, there are others who have drawn on kava's traditional meanings and sociocultural function to both enhance and expand their sense of identity through the practice of kava drinking.

Among indigenous users as well, there has been a change. For instance, extremes between old and urban contemporary styles of kava consumption can be found (Showman, 2015). In contrast to urban contemporary Ni-Vanuatu kava drinkers who tend to stand and drink, urban Fijian and Tongan kava drinkers, including those in diaspora, generally mix and serve the beverage from a designated bowl to those seated on woven mats.

According to some, the latter is more in keeping with Pacific cultural values, in which some believe that standing and drinking kava is disrespectful. In some instances, kava continues to be consumed within its traditional environment, while in other instances, new user groups have emerged who position the drink and its associated practices as uniquely Pacific.







Pharmacology and Health Benefits

The pharmacological activity of kava is attributed to six key psychoactive compounds called kavalactones. The sensory feeling of slight numbness of the tongue and lethargy are caused by these psychoactive chemicals acting on receptors in the central nervous system (Singh, 2009).

Kava plays an important role in traditional medicine and is used across the Pacific as a remedy to calm nervous conditions, induce sleep and relaxation, counter fatigue, and reduce body weight. Other medicinal uses include treatment of urinary tract infections, asthma, rheumatism, headache, fever, gonorrhoea, and syphilis, as well as use as a diuretic and stomachic (Lebot and Cabalion, 1988). Consumed in beverage form, kava exhibits mild local anaesthetic and analgesic effects as well as antifungal and antibacterial properties (Singh, 2009). The use of kava for medicinal purposes is now widespread, including in Europe, North America, and Australia, where it is used to treat anxiety, nervous tension, restlessness, mild depression, and menopause related symptoms (Restorative Medicine, n.d.).

The pharmaceutical market for kava existed in Germany and France as a prescribed drug for many years, used in capsule form for psychological disorders, considered a natural replacement for drugs such as Valium (diazepam) that relieve the symptoms of stress and anxiety. The understanding of German scientists of the pharmacology of kava as early as the 1930s can be traced back to German colonisation of Samoa and New Guinea before World War I. Prior to the initial ban, the German Commission E recommended kava for the treatment of nervous anxiety, stress, and restlessness, and kava has been recognized by contemporary pharmacology as an effective anxiolytic (Blades, 2016; Sarris et al., 2013), as well as an effective alternative to hormone replacement therapy (HRT) for women (Braun and Cohen, 2010; Cagnacci et al., 2003).

In more recent years, kava has been used in cancer research, specifically in the treatment of ovarian, bladder, colon and lung cancers, as well as leukemia (Lim, 2016). Kava has been widely reported for its medicinal benefits, but it has also gained increasing interest as a recreational beverage and alternative to alcohol, to the point that it can now be found in franchised bars in the United States (Showman et al., 2015; Wolinski, 2018). There are some USA bars that mix

kava with other substances such as alcohol or kratom to potentiate its effects, which has raised the concern of several medical professionals due to the risk associated with 'drug interactions' (AddictionResource, 2019).

In Steiner's (2001) article, 'Kava as an anti-craving agent', he reports preliminary findings concerning the use of kava in the treatment of alcohol, tobacco and/or cocaine dependency. Braun and Cohen (2010) also discuss the benefits of kava for

treating withdrawal symptoms associated with benzodiazepine use. They report that kava "may have an anxiolytic effect beyond the benzodiazepines", and that "withdrawal symptoms following discontinuation of benzodiazepines occurred somewhat less frequently under treatment with kava extract, and even if they did occur, the anxiolytic effect remained."





gaia

Kava Root



As an additional point of interest, kava has been used as a component of two New Zealand addiction rehabilitation programmes; one in the Bay of Plenty aimed at alcohol abuse and another in the Marlborough region, a smoking cessation program with a 90% success rate (Daunauda, 2016). A further finding by Marotta (Aporosa) is that the use of kava and talk therapy is extremely valuable in his work with heroin addicts in Thailand and Massachusetts, USA.

The anti-craving properties of kava are said to work particularly well when kava is used in a more traditional setting, such as a form of talk therapy that encourages conversation between people.

Several randomised, double-blind, placebocontrolled trials of certain standardised kava preparations have demonstrated beneficial effects on anxiety measures (Sarris, 2013).

However, further well-designed trials are required to confirm these effects. The majority of clinical trials on kava extracts have used one type of kava extract (containing 70% kavalactones) and it cannot be assumed that similar results will be achieved with other kava extracts. In addition, well defined standardised kava preparations have been compared with certain standard anxiolytics in clinical trials involving patients with anxiety. The results of these studies suggest that kava extracts may be as effective as certain standard anxiolytic agents, however further investigation is necessary (Thompson, 2004; Bilia, 2017; Blade, 2016; Braun and Cohen, 2010; Geier, 2004). Recently, Waikato's D. 'Apo' Aporosa won the Fulbright scholarship to study the effects of kava on Post Traumatic Stress Disorder (Marriner, 2022).

Kava's anxiolytic effects are supported by data from pharmacological studies, although many traditional uses of kava have not been scientifically examined (Aporosa, 2022). A substantial

number of pharmacological studies have examined the effects of the synthetic kavalactone ()-kavain rather than the natural compound (b)-kavain (Sarris, 2013). The standardised kava extracts have generally been well tolerated in placebo-controlled clinical trials; adverse events reported have generally been mild and transient, and similar in nature and frequency to those reported for placebos. A clinical trial, however, can provide only limited information regarding the safety profile of a drug (Aporosa, 2022). There have been spontaneous reports of hepatotoxicity associated with the use of kava preparations since 2000, however further research determines this to be idiosyncratic (Thomsen, 2020).

In this context, kava was prohibited from being used in unlicensed medicines in the UK in 2003, and all licensed kava products were removed from the market in the EU. An expert working group in the UK reviewed evidence in 2005 regarding the hepatotoxicity of kava and concluded that there was insufficient new evidence to change the regulatory position, which means that kava cannot be included in unlicensed medicines (Richardson, 2007).

A voluntary recall was also initiated in Canada and Australia, and in the USA, consumers have been warned of the risk of liver toxicity associated with the consumption of kava-containing products. Reports of liver toxicity have been reported in association with supplements containing ethanol or acetone- extracted kava rather than kava as a water-based beverage, an ongoing issue which has been debunked by the WTO Risk Assessment Report.

An ichthyosiform (scaly, non-inflammatory) skin condition, termed 'kava dermopathy', is also reported following the chronic consumption of kava preparations (Norton, 1994).

Global Outlook

Global Production

Kava is currently grown almost entirely in the Pacific region. It makes a significant contribution to rural livelihoods in Pacific Island producing countries. It is an important cash crop and a significant source of income and employment for rural households and those involved in its harvesting, processing, and sale.

There are reports of people attempting to grow kava in the warmer parts of the USA and in South America, Australia (Civil Beat, 2021) and some parts of Southeast Asia, although there is no commercial trade in these regions yet (Henry, 2022). This represents a very real threat to the Pacific kava market; South American countries with more significant resources and processing facilities, as well as a reduced transport distance and cost would more than likely be a preferable supplier of kava to the North America and European markets.

Data from the Government of Vanuatu puts kava as the largest export product in Vanuatu as of 2021, representing 51% of the total export receipts. It has been increasing in both value and volume, up 20% or 46 tonnes on the previous year, and increased 6% in price, generating an estimated VTV939 million in annual export earning providing income to over 30,000 households across many of the country's islands. Livelihood income is generated from kava through direct export of kava chips, local sale in 'nakamals' (kava bars), value-added products, and services along the value chain such as packaging and transportation. Most kava from Vanuatu is exported to New Caledonia, Fiji, US, Guam, China, Kiribati, and New Zealand (Civil Beat, 2021).

According to the 2020 Fiji Agricultural Census Report, 26% of households in Fiji are engaged in growing kava, with an approximate production of more than 12,000 tonnes. Fiji exports kava to markets including other Pacific nations, New Zealand, to the European Union, USA, and some Asian nations. In 2020 Fiji's kava exports were worth FJ43.6 million, up 34.3% on the previous year. The Fiji Ministry of Agriculture's latest market price data puts waka at FJ107.50/kg and lewena at FJ74.58/kg. Some value-added processing is done in Fiji including kava supplement drinks and kava capsules, but it is generally exported as powdered product made up of dried roots (waka) and chips (lewena). The domestic market is substantial and is considered as valuable as the export market, with a consumption value of over FJ1billion in 2020.

The global kava root extract market size was valued at US\$1.02 billion in 2021. The market is projected to continue growing significantly for the remainder of the decade, forecasted at over US\$3 billion (Fortune Business Insights, 2021).

The market is anticipated to see greater penetration in untapped markets such as India, Dubai, and China. Additionally, increasing awareness about kava's medicinal and therapeutic benefits provide a positive impetus to its use in various functional foods and beverages, another industry slated for substantial growth.

There are several companies experimenting with kava as an ingredient in skincare, along with other health and beauty products, and is likely to be a growing export market in the coming years.

Global Trade

There have been significant changes in the market for Fijian kava and kava products over the last two decades. While the domestic market currently dominates the industry, it has not always been the case.

A large demand in Europe for medicinal and pharmaceutical kava created a 'kava boom' in the late 1990s, with export sales many times greater than the current level. Nevertheless, kava toxicity claims in Germany led to the decline of the boom due to liver damage suffered by a few patients. As a result, international concern was raised about the safety of kava products, and in 2001 Germany banned kava and its products (Kuchta, 2015). PROINVEST3 provided assistance to the Pacific kava-producing countries and their stakeholders, including the European Union, in rebutting this claim (PHAMA Plus, 2018). A major role was played by the International Kava Executive Committee (IKEC) in organizing international meetings and coordinating with Pacific Ambassadors in Brussels. World Health Organization (WHO) subsequently cleared the claim of liver toxicity, and the ban was lifted in 2015. Nevertheless, exports to the EU have not resumed in any significant way and Germany reversed the decision again in 2019 (Thomson, 2021).

According to anecdotal evidence, many EU and



Kava comes to the New Zealand cultural mainstream. Here, a kava ceremony at Hillary College, Otara, Auckland in 1973. (Source: Heritage Images Online, Auckland Libraries.)

UK kava consumers purchase from online suppliers based in New Zealand and the United States (Kava Forums, n.d.).

The kava boom and subsequent bust highlight the necessity of strict regulation and quality control for products such as this. As a result of the boom, there were many unscrupulous dealers and fly-by-night operators who traded inferior quality or *tudei* varieties.

Due to the lack of supporting infrastructure and mechanisms at the time such as standards and legislation, it is necessary to re-examine the industry in order to chart a clear course for the future and avoid future incidents similar to those that occurred in Europe. PHAMA Plus (2017) has worked with Vanuatu, Samoa, Tonga, and Fiji to develop standards on quality control for kava.

Today, there is a marked difference in the kava market, with the majority of kava traded with and between the Pacific Island Countries and Territories (PICTs). Within the PICTs, kava is primarily traded for beverage purposes,



Prime Minister of New Zealand David Lange (right) at a kava ceremony. (Source: Heritage Images Online, Auckland Libraries.)

whereas outside the region, it has both beverage and medicinal/pharmaceutical applications. Despite its small size in relation to the PICT region, the US kava market has the potential for significant growth, with a number of new kava bars offering high prices for the best quality kava on the market (Wolinski, 2018).

In the three main destinations beyond the Pacific, the beverage market is concentrated both in the Pacific Islands and in Pacific Island(er) communities. Kava is consumed as a beverage by all three island groups of Micronesia, Polynesia, and Melanesia. It is most commonly consumed in Fiji, Vanuatu, Kiribati, Samoa, and Tonga, while lesser quantities are consumed in Solomon Islands, Papua New Guinea, and the Federated States of Micronesia. In Australia, New Zealand, and the United States, kava consumption is largely concentrated among Pacific Islanders, with a small market for non-islanders and Indo-Fijians (Aporosa, 2015).

Nonetheless, this has changed in the USA, where over one hundred Kava bars have opened, increasing the popularity of the beverage among non-islanders (Aporosa, 2019; Wolinski, 2018). Based on the results of a market scoping mission undertaken by the Fiji's Ministry of Agriculture in 2015, the market for Fijian kava is estimated to be worth approximately US\$15 million per year. It was estimated that this could easily grow to 20 tonnes per year if export prices were reasonable. The estimates provided here have proven to be very conservative.

Development of a regional standard for kava products has been under consideration for some time by the Codex Alimentarius Coordinating Committee for North America and the South West Pacific (CCNASWP). The purpose of the regional Codex standard is to protect the health of consumers, assure quality and promote trade. The standard is intended to cover kava products

for use as a beverage when mixed with water and does not apply to kava beverage as such, or products used for medicinal purposes, or as ingredients in foods, or for any other purposes (ANZ Food Standards Code). Codex recently approved the regional standard which will harmonise national standards, including those of Fiji and other Pacific countries (FAO, 2020).

Australian regulations on kava started in 1997. People without a permit were restricted to 2kg per person, followed by a complete ban in 2007 for indigenous communities in the Northern Territory, while a 2kg limit remained for the rest of Australia. In 2020, the Codex Alimentarius codified the regional standard for kava as a beverage when mixed with water (FAO, 2020; Blades, 2018). While this was being drafted, the Australian Federal Government announced a pilot programme in Port Vila Vanuatu for A \$1.9 million over four years to increase consumer access to kava (Aporosa, 2019). Restrictions were eased in Australia and the limit was raised to 4kg per person. The second stage of the pilot programme which would allow for the commercial importation of kava for non-medicinal purposes was delayed by the Covid-19 pandemic, but after commencing in December 2021 has so far seen 183 exporters exporting nearly 100 tonnes of kava into Australia, with a 73% labelling compliance rate.

PHAMA Plus is working with the Australian Department of Foreign Affairs and Trade to monitor the impact of commercial kava pilot on kava-growing countries in the region. This includes looking at the number of companies exporting to Australia, the value of kava exports and changes in the livelihoods of growers and other kava value chain actors (Nintione, 2022). Australian regulations on kava started in 1997.

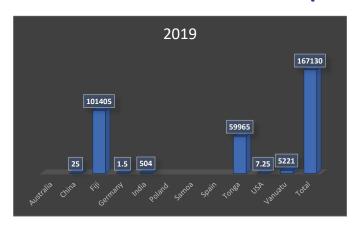
When analysing the scope and scale of the kava market, it is important to keep in mind that the

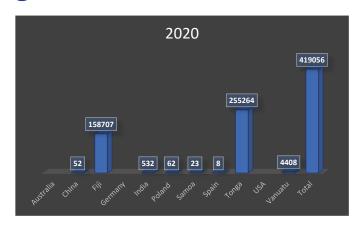
product is relatively new to world commerce. The widespread commercialization of kava only began 40 years ago, despite the fact that the beverage has been consumed for thousands of years in Pacific Island cultures. As a result, exporting nations and retail product manufacturers became driven to meet consumer demand. The repeal of the European bans and the introduction of kava bars to the United States is encouraging expansion of the kava market. As long as proper

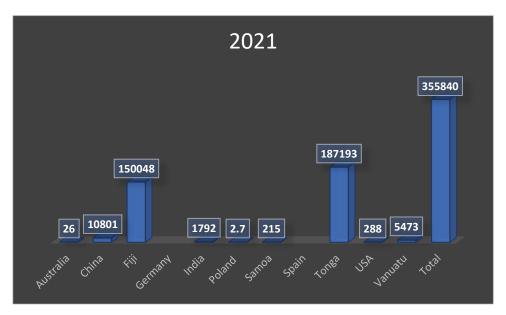
quality controls and standards are set, the market is poised to expand further.

However, unlike an established commodity in a market that has matured over hundreds of years, there are relatively few institutions, systems, and standards that exist for kava. A very limited amount of public data is available regarding the kava trade outside of key Pacific exporting countries.

Kava Importing Countries







(Source: NZ MPI Import Data. Quantities in kg.)



Kava processing in Vanuatu. (Source: PTI NZ Image Library)



Powdered kava. (Source: PTI NZ Image Library)

Key Global Trends

Affecting kava imported to NZ. Data sourced from IHS Connect Global Trade Atlas.

	Key Global Trend1	Key Global Trend2	Key Global Trend3	Key Global Trend 4
Description	The rate of consumers valuing sustainability is on a constant upward trend. This is partially driven by Gen Z and younger market alone will be worth \$158.3 billion in a market alone will be worth \$158.3 billion in a market alone will be worth \$158.3 billion in a market alone will be worth \$158.3 billion in a market alone will be worth \$158.3 billion in a market alone will be worth \$158.3 billion in a market alone will be worth \$158.3 billion in a market alone will be worth \$158.3 billion in a market alone will be worth \$158.3 billion in a market alone will be worth \$158.3 billion in a market alone will be worth \$158.3 billion in \$158.3 billion in \$158.0 billion in \$158.	nd, with Research ctional beverage 1023. el good or er curious! w or zero-alcohol rs are making ly during and after num health and conditions that gfor natural without any harm.	As 53% of web traffic comes from organic searches, ranking visibility is vitally important to businesses. In 2020, Google introducted a new ranking criteria system called Google Core Web Vitals. Previous iterations assess for high-quality contact and audited for mobile-friendliness, safe browsing and basic experience signals. This additions will analyse content loading speed, interactivity and visual stability (Forbes, 2021). The inclusion of Core Web Vitals as a ranking signal means that websites that fail to apply the best practices will be given lower ranking scores than ones that don online buying has consistently grown over the past decade, with Kiwis spending NZD7.67 billion online in 2021, an average monthly spend per shopper of NZD297 (NZ Post, 2022). Consumers expect a comprehensive and consistent omnichannel marketing experience (the integration and cooperation of the various channels –digital and physical - with the goal of creating a consistent brand experience.) as well as highly personalised service.	After experiencing lengthy lockdowns, never has 'finding your tribe' been more important to consumers across the globe. Creating a community is vitally important to consumers, as is finding your identity, especially to younger consumer. The influence of identity on consumer behaviour is well documented; consumers like products, brands and consumption behaviors that are linked to category labels with which they self-associate.
New Zealand market	New Zealand consumers have always valued a 'clean, green' image. The rate of people eating vegetarian has increased by about 10% in the past year (RNZ, 2022), as has the rate of refillable products, compostable, and plastic free packaging in New Zealand. Businesses need to ensure they are making active steps to reduce their carbon footprint, contribute to the good of society and the environment, and use ethically produced, traceable ingredients to appeal to the New Zealand market.	Kava nutraceuticals are entering the New Zealand market at an increasing rate, which most large health supplment companies having one of more products containing kava. New Zealanders have pivoted to prioritising helath and wellbeing over the course of the COVID-19 pandemic, and are looking for natural remedies to their problems, including depression, anxiety, stress, and insomnia. Additionally, a rise in the 'sober-curious' movement of New Zealand young people has seen a growing demand for nonalcoholic substitutes.	95% of New Zealanders use the internet every day and there is an 81% penetration of smartphone use. Consumers now have an expectation that businesses will have an online presence and use this to consider business trustworthiness before making a purchase. It is rare to find a business that doesn't make use of digital marketing in some form or another, and many businesses take a multi channel approach; mobile, social media, SEO, Google or Facebook ads, texts, and more. With the saturation levels of online advertising being so substantial, businesses are finding increasingly innovative ways to reach their target market.	Many New Zealanders are wanting to connect more with their heritage or connect with the traditions of the South Pacific. Rava bars in New Zealand have already made significant progress in capturing new markets, however their market reach is generally small due to their nature.
PIC Exporters of Kava	With the high level of organic suitable soil in the PICTs, Pacific Island kava exporters are in a prime position to use this in their brand identities. Telling the story behind environmentally friendly practices (replanting soil health management, sustainable packaging) is key to capturig the New Zealand and global markets. Promoting community and social impact is an imperative part of telling the story of a brand. Creating a stronger brand identity improves brand recall, promotes brand loyalty, and inspires consumer trust. Many of the companies in the Pacific have gripping stories, and support large parts of their community - consumers in New Zealand and the rest of the world are turning more and more to products that "do good". This can be as simple as paying employees a fair living wage, paying fair trade prices to farmers and suppoliers, entering into partnerships with ethical partners, ensuring transparency of supply chain, and raising the community up.	Brand and product promotion for kava exporters is once again key here. Kava exporters should work with scientists, universities, research organisations, and government bodies to encourage research on the benefits and effects of kava. Through this, more claims can be made on kava packagin, more kava will be used in pharmaceuticals and therapeutic supplements, and the functional food and beverage industry will open up to kava. Educating consumers on the benefits and lack of side effects will encourage more non-Pacific drinkers to try the product as an alternative to alcohol.	PICT kava exporters must ensure they have a strong online presence that inspires confidence in the consumer. As the export business grows it is important to move away from selling on social media platforms such as Facebook to a dedicated website. Many things can influence a customers judgement of how reputable the site is; from fonts, to colours, content, and layout. Even if an exporter chooses not to sell directly to customers, having a website with product and company information is more likely to encourage trust and repeat purchases.	Promoting kava and places where kava is consumed as safe, welcoming spaces where people make connections and talk freely is a long-term strategy kava exporters can take to ensure growing markets for kava. Partnerships with kava bars or places where kava is sold to be consumed could solididy an export position, and introduce kava products to new markets as well as converting seasoned kava drinkers to your brand. Thes businesses have the relevant local market knowledge of best practices when it comes to consumer demands.

NZ Market Overview

A significant opportunity to supply New Zealand with kava exists for Pacific Island exporters, as both the Pacific diaspora and new consumer markets are showing growth. New Zealand importers have cited a present lack of consistently available, quality kava in the market and subsequently expressed an interest in working with exporters and co-operatives to import high quality kava from the Pacific Islands. Market opportunities were also identified in the value-added kava products such as nutraceuticals, provided that the supply is consistent, and a high-quality standard is maintained.

The New Zealand market for kava is expected to grow as the population of New Zealand becomes increasingly diverse and the interest in connecting with the Pacific part of New Zealand's identity grows, as well as an increased interest in the 'sober-curious' movement by young people, and a prioritisation of health and wellbeing.

Product Types

Powder

The most commonly found form of dried kava roots and most frequently purchased by those who like the more traditional and interesting way of preparing and drinking kava. It's also the most affordable form of kava. The traditional powder should be placed in a strainer bag, immersed in warm water, and then kneaded hard for approximately 10 minutes. It can make a strong and full-flavoured, but smooth and relatively easy to drink beverage.

Instant Kava

Instant kava is a fantastic option for beginners, those who cannot be bothered with the traditional preparation techniques and seasoned drinkers looking for a more convenient option. These products are made by dehydrating freshly prepared, strong, green kava (obtained through a cold-water extraction of freshly harvested kava roots) until all that remains are the pure instant granules. The instant powder is incredibly fine, smooth, and potent. It can be mixed directly with water or juice without the need for kneading or straining. Instant kava is more expensive than any other type of kava, but it also offers a remarkable combination of potency, smoothness, ease of drinking and convenience. It is usually enough to use just 30-50 per cent of the amount of traditional kava to get similar effects.

Ready to Drink Kava

As the name suggests, this form of kava is simply pre-made kava drink that can be enjoyed without any additional preparation. As such, it is the most convenient and easy-to-consume form of kava. This can be made from either fresh (green) roots or from dry powders. Both are shelf-stable at room temperature for up to one year from the date of manufacturing and produced in a stateof-the-art facility with



only two ingredients, kava and water, without any chemical extracts or preservatives. While there are not many options currently available on the market, this product is in product development. It is shelf stable without causing any significant damage to its properties and can be more potent than what can be achieved at home via manual preparation.

Micronised Kava

This is a slightly more controversial form of kava. In essence, micronised kava promises the convenience of instant powder at a more affordable price. This is achieved by grinding the kava root so fine that the resulting powder can in theory be mixed directly with water or any other soft drink (just like with the instant kava, no filtering or kneading necessary). This process requires extra work but nowhere near as much work as the making of instant or ready-to-drink kava and hence micronised kava can be relatively cheap. However, the problem is that even the finest powder is never as smooth as instant or properly strained traditional kava and for some people this form of kava is more likely to cause stomach upsets than any other form of kava. This is true for all micronised kava, including the most premium versions of it, that are made by not just fine grinding but also by the removal of some of the hardest fibres (known as makas) prior to milling.

Nutraceuticals

Nutraceuticals containing kava are advertised as being designed to support the mind and body in times of stress and anxiety. One common method of preparation for anxiolytic kava is ethanol or acetone extraction (though some companies use a water extraction) and the solvent-free extract is packaged into the final product in the form of tablets and capsules. Due to the potential risk of hepatotoxicity from these products, Germany banned kava's clinical anxiolytic use in 2002.

Although the WHO cleared the claims and Germany lifted the ban for a time, other EU countries were slow to follow, and more clinical data are required before its re-entry as a clinical anxiolytic agent.

Due to concerns about the long-term

safety of kava-containing nutraceuticals, these products have warnings to not consume for a period of longer than six weeks, with alcohol, while pregnant or breastfeeding, or while on some types of medication. Kava nutraceuticals represent a market of high growth opportunity.

Health and Beauty

There are very few kava-containing health and beauty products currently available in the New Zealand market, however as innovation in the Pacific continues, businesses are likely to be able to export the soaps, haircare, and makeup products being created. There is opportunity here for partnerships with New Zealand manufacturers or processing facilities to gain the resources required for large-scale production and exploit the brand of New Zealand made products.

Market Structure

The structure of the New Zealand import industry for fresh produce can be segmented into three tiers based on commercial size.

Large commercial importers

Large commercial importers are aligned with kava-containing health products and nutraceuticals. These tend to be exported from the Pacific Islands to processing plants in India, before entering New Zealand for further processing and packaging. These companies tend to supply health stores and pharmacies.

Medium commercial importers

There are several small-to-medium sized companies which specialise in importing and distributing kava. Restricted by their size and the demand for kava, these companies (often sole

traders) deal only in limited quantities and carry out any necessary repackaging. Such enterprises tend to purchase between 50-100kg of kava per month.

Small importers (informal)

This tier consists of small family, friend, and church networks. Products are imported directly from their home countries (such as the Pacific Islands) through family connections and supplied to their own local buyers such as dairies and independent retailers, as well as those in their social circles. One commercial importer believed that one in five Fijian households in Auckland imported, or had close connections with someone who imported kava

Commercial buyers consider consistency in supply and quality, packaging, price as key factors in their purchase decision. With emphasis on quality and consistency of supply, the large buyers have the established infrastructure and systems in place to supply national retailers and consumers effectively. Quantity of kava supplied is significant, with one large buyer importing over 12,000kg of kava via China and India after processing for the nutraceutical market.

In terms of final product, the New Zealand market can be split into three main categories.

The first is the beverage sectors, which has two sub-sectors: traditional/ceremonial; and for regular use as a social and relaxation drink, which includes the new generation of kava drinkers. The Food Standard stipulates that the claims cannot be therapeutic in nature – they cannot refer to prevention, diagnosis, cure or alleviation of a disease or condition. 'Relaxation', 'well-being' and 'improved sleep' are not medically defined conditions and thus can be addressed with kava as a food product.

The nutraceutical market is a relatively new market segment for kava. Non-food products that make therapeutic claims with a named condition must be backed up with scientific evidence and are regulated by the New Zealand Ministry of Health. In 2021, the New Zealand government decided to regulate natural health products under the Therapeutic Products Bill. However, they won't be regulated as therapeutic products or as foods, and will have their own regulations under the Bill.

Herbal medicines could be considered a third category as the kava is used with other herbal plant material as health supplements but does not go through the process of extraction with any chemicals. The market for this product category is potentially large and needs to be developed in Asian countries, particularly China and India where 60% of the population regularly use herbal medicines.

Demand Factors

The New Zealand market for kava is small and noted to have potential to grow further driven by the growing cultural diversity of New Zealand's population with the growth of many of ethnic communities.

There is a good demand for kava from the Pacific Island population in New Zealand. According to the 2018 Census, 381,642 people of Pacific ethnicity were living in New Zealand, an increase of 28.96% on the 2013 Census (Stats NZ, 2019). The majority of the Pacific Island ethnic group live in Auckland, approximately 63.9%, or 15.5% of Auckland's population.

Throughout New Zealand were 777,836 people identifying with the Māori ethnic group, up 29.6% from 2013. The most recent estimate of the New



Kava ceremony at a hotel in Fiji. (Source: Royal Davui Island Resort)

Zealand Māori community is 875,300 or 17.1% of the entire population (Stats NZ 2019) While Māori people have not traditionally drunk kava, the beverage in increasing in popularity with this group as a means to identify more closely with their Pacific identity.

The Asian population in New Zealand represents an untapped market for kava and kava-including supplements. These populations have strong social institutions of using herbal and homeopathic medicines and would be relatively easy to educate and convert to kava use and purchasing. The Asian population in New Zealand increased from 471,708 to 707,598 people in the 2018 NZ Census (an increase of just over 50%), with the majority residing in the Auckland area (Stats NZ, 2019).

Since the beginning of the COVID-19 pandemic, there has been a growing demand for products that improve health and wellbeing. The global functional food and beverage industry is expected to grow to US\$158.3 billion by 2023 and

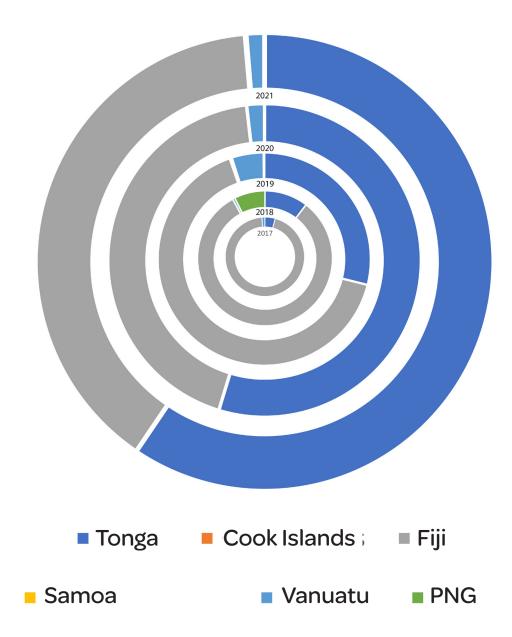
is exhibiting growth in all market segments (Research and Markets, 2021). The largest market for growth is expected to be China. New Zealand-based consumers are increasingly turning away from alcohol, soft drinks, and juice for kefir, kombucha, and natural energy drinks.

People of the Pacific diaspora tend to buy larger quantities of kava for social or traditional drinking, while new kava drinkers are more likely to buy smaller quantities to drink alone.

Conservative estimates suggest that around 30,000 people drink kava in New Zealand regularly (Aporosa, 2019), though the majority of them purchase kava from those who have imported it without a license.

There is a growing number of kava bars in New Zealand, located in city centres across the country. Some offer kava only, in a more traditional setting, while some offer a selection of 'functional' beverages such as kombucha.

Global Trade Atlas Kava Data



	20	17	20	18	20	19	20	19	20	20
	Vol kg	\$ Value	Vol kg	\$ Value	Vol kg	\$ Value	Vol kg	\$ Value	Vol kg	\$ Value
Cook Is			10	135						
Fiji	83,655	2.1 M	95,381	3.1 M	79,236	2.9 M	98,643	3.2 M	108,115	3,261,119
Samoa			5	75	400	7,095	23	806	228	9,965
Tonga	3713	29,363	12147	79,385	34,765	47,442	124,238	130,162	164,250	134,068
Vanuatu	1045	78,228	670	62,994	5,824	233,936	4,157	374,875	3,556	456,059
PNG			8,617	61,981	105	4,487				



Kava drying in Vanuatu. (Source: PTI NZ Image Library)

Import Statistics

Three significant problems contribute to the lack of accurate kava trade data. The first is that kava has been a largely informal market for many years, so a large portion of the kava exported to New Zealand did so in suitcases of travellers. COVID-19 allowed for a slightly clearer picture as international borders were closed so suitcase imports were not possible. There was a large jump in reported kava imports to New Zealand throughout 2020-2021 which may indicate the new reliance o formal exports for the New Zealand market.

The second is that global trade data cannot be relied upon for a clear picture of trade. Pure kava exports (most common form of export) are classified under the tariff code 121190049 (NESOI

primarily for use in perfumery, pharmacy or insecticides) or 12129900 (NESOI Vegetable products of a kind primarily used for human consumption) which is a catchall category shared with "other" or NESOI products. Despite a presumption that the majority of exports from the Pacific in this category are kava products, re-exports become indistinguishable from other products when passing through an intermediary country like India or China, as kava for use in pharmaceutical and nutraceutical products is (BePure, 2022).

The third issue that arises and is under consideration by Pacific regulatory bodies is the lack of a standardised method of capturing data surrounding kava. The PICTs have different reporting requirements on kava grown and exported, which doesn't allow for clear comparisons between the countries.

New Zealand Market Requirements

The following discusses the import requirements for kava as a food, under the Food Standards Act.

It is preferable that all documentation be written in English. For documents not written in English and where an inspector cannot determine whether New Zealand's import requirements have been met, MPI reserves the right to require the importer to obtain a translation (at the importer's expense) from a competent authority.

- (1) Regardless of any requirement for a phytosanitary certificate, unaccompanied consignments must be identified by means of documentation such as a bill of lading, airway bill or invoice, except in certain conditions.
- (2) Other forms of documentation (e.g., manufacturer's declaration or certificate) are recommended to clarify the commercial processing and packaging details of the commodity concerned, especially if the product contains multiple ingredients or has undergone considerable processing.
- (3) Manufacturer's declarations or certificates must be issued on company letterhead by a person authorised to act on behalf of the company and must include:
 - a) their signature, job title and date of issue;
 - b) name and address of the supplier (if different to the manufacturer);
 - c) identity of the product (description or brand name);
 - d) details of processing; and
 - e) date of manufacture.
 - (4) If these details are not clear, a consign ment may still require inspection

Import Process for Fresh Kava

Fresh kava must be sourced from a production site that uses standard commercial cultivation methods that comply with the principles of Good Agricultural Practice (GAP) including pest control, harvesting, sorting, cleaning, inspection, and packaging.

Phytosanitary inspection

- (1) A sample unit for the purpose of this IHS is an individual fresh kava tuber.
- (2) The National Plant Protection Organisation (NPPO) of the exporting country must:
 - a) Sample each homogeneous grower lot of fresh kava. The minimum sample size for inspection must be based on a 95% confidence level that not more than 0.5% of the units in the lot are infested as set out in ISPM 31;
 - b) Visually inspect each sample unit according to official phytosanitary proce dures in accordance with ISPM 23. Guide lines for inspection and ISPM 31.

 Methodologies for sampling of consign ments for all regulated pests required by New Zealand;
 - c) Verify that Basic Measures have been applied;
 - d) Reconcile that the number of packages presented for inspection is consistent with documentation;
 - e) verify that traceability labelling is complete; and
 - f) verify that phytosanitary security is maintained for the consignment.
- (3) The NPPO must contact the New Zealand Ministry for Primary Industries (MPI) to establish the regulatory status of any pests not listed in Biosecurity Register for Imported Commodities (BORIC) and found during an inspection.

Phytosanitary certification

- (1) Each consignment must meet the requirements set out in Part 3 Inspection, Verification and Documentation Requirements and be accompanied by a phytosanitary certificate issued by the NPPO in accordance with ISPM 12. Phytosanitary certificates.
- (2) The phytosanitary certificate must include the following where applicable:
 - a) Sufficient detail to enable identification of the consignment and its component parts. Information must include country/place of origin.
 - b) The scientific name of fresh kava (*Piper methysticum*).
 - c) The following certifying statement, or a variation that is compliant with ISPM 12. Phytosanitary certificates and has been approved by a Chief Technical OfficerCTO

This is to certify that the plants, plant products or other regulated articles described herein have been inspected and/or tested according to appropriate official procedures and are considered to be free from the quarantine pests specified by the importing contracting party and to conform with the current phytosanitary requirements of the importing contracting party, including those for regulated non-quarantine pests.

(3) If a consignment of fresh kava is stored in another country in transit to New Zealand or opened, split up or has its packaging changed prior to when it arrives in New Zealand, a phytosanitary certificate for re-export is required from the transiting country, in accordance with ISPM 12. Phytosanitary certificates, and must accompany each consignment.

Packaging for Exporters

- (1) All packaging and packaging material must be clean, and free from soil and other contaminants.
- (2) It must be possible for an inspector to identify the product (e.g., the labelling is ideally in English and the labelling is not damaged). MPI encourages importers of commodities covered by this IHS to have packaging and labelling written in English to expedite the importation of the commodities.
- (3) Food safety standards on composition and labelling are detailed below.

Requirements for retail food labels

Food labels must:

- be part of or attached to the food
- be easy to read
- be written in English
- have the right information to meet the rules of the food standards code, the Fair Trading Act 1986, and the Weights and Measures Act.
- a lot/batch identification: this enables you to trace your product if it needs to be recalled
- an accurate name or description of the food: and some foods (for example, processed meat, honey, and infant formula) must use the exact names from the code
- the name and physical address of your New Zealand or Australian business: A PO Box, web site, or email address by itself is not enough.
 The food label must clearly have a date mark for foods with a shelf life of less than two years.

This should be written as one of the following:

- Use by: if the food could make people sick if consumed after a certain date.
- Best before: if the food declines in quality but is still safe to be consumed.
- Bkd on/Bkd for: if your product is bread with a shelf life of less than 7 days.
- Also to be included any specific food storage instructions needed to keep the food safe to eat for the duration of the shelf life.

Food warning and advisory statements

Some ingredients or foods need to be avoided by some people. This could be because they have an allergy or because they are pregnant. Products that contain these ingredients need to include a statement on their label.

There are three types of statements:

- **Allergy declaration**: ingredients that can cause allergic reactions for some people.
- Warning statement: only applies to some types of food (such as royal jelly and kava).
- Advisory statement: applies to certain foods or ingredients which may cause health risks for some consumers.

All kava packaging needs to have the statement 'May cause drowsiness.'

Most food labels must clearly have the following. There are some exceptions.

- Nutrition information panel (NIP).
- Ingredients list.
- Irradiated and genetically modified food information.
- Percentage labelling.
- Amount of food.

These are optional but have rules that must be followed:

- Nutrition content claims and health claims.
- · Health Star Rating.
- Nutrition information panel (NIP)
- A nutrition information panel (NIP) shows the amount of energy, protein, fat, saturated fat, carbohydrate, sugars, and sodium in a food. It has an amount per serving and per 100g or 100ml for each nutrient.

NIP must meet the rules about layout and content as stated in the code.

Ingredients must be listed in descending order, including additives. There are rules about how

these are listed that won't be discussed here.

If it is chosen to make nutrition content or health claims about the product, it must:

- be able to prove the claim that has been made
- add the nutrition information for the claim to the Nutrition Information Panel (NIP). This rule overrides any exception to having a NIP.

Packaging must state how much food it contains in appropriate unit of measure (for example kg, g, ml, l) in text 2mm or bigger.

For manufacturing/processing - the food label must:

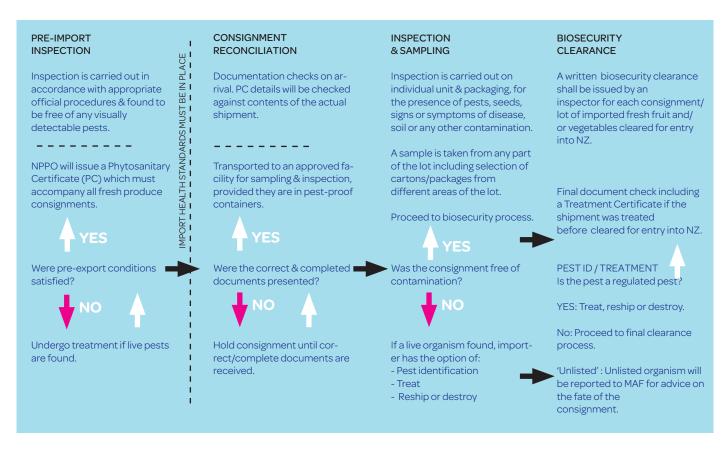
- be part of or attached to the food
- · be easy to read
- be written in English
- have the right information to meet the rules of the Code, the Fair Trading Act, and Weights and Measures Act.

The label may be:

- on the package, or
- if there is more than one layer of packaging, the label needs to be on the outer package.
- If the food is in a transportation outer, the label needs to be clearly visible through the outer.

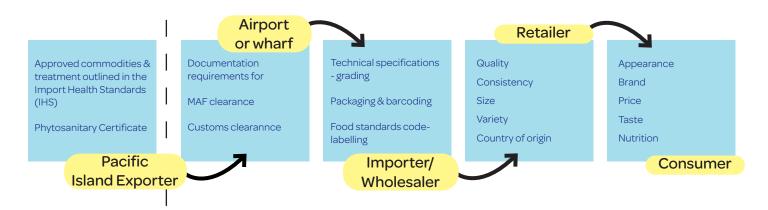
The food label must clearly have:

- an accurate name or description of the food:
 Some foods (for example, processed meat, honey, and infant formula) must use the exact names from the food standards code
- a lot/batch identification: to enable you to trace your product if it needs to be recalled
- net contents of food in an appropriate unit of measure: (for example, kg, g, ml, l) in text size
 2mm or larger, and be near the name of the food
- the name and physical address of a New Zealand or Australian business. A PO box, website, or email address by itself is not enough.
- the price
- a GS1 barcode.



(Source: New Zealand MPI.)

Kava Path to Market



(Source: New Zealand MPI.)

Competition

Competitive Landscape

Because of kava's position as an ingredient trading in the larger health and wellness market, there are two types of competition to consider here: competition for wholesale kava supplies and also competition for other ingredients that trade in the same market.

This makes the industry's current threat from new competition high. Any new kava growing origin, like those that might emerge from South America, South or Southeast Asia, is a potential new competitor. The *Piper methysticum* plants are relatively easy to grow (preferring lower elevations, consistent moisture, and partial sun, and is often grown under the shade of another crop like taro or coconut) they're hardy and can be planted almost anywhere in the tropics.

Fresh or ground kava root without considering the costs for differentiation (certifications, branding, standards, quality scheme, etc.) is relatively easy and inexpensive to reproduce. The threat of new entrants to competition may also include any other ingredient or product that can be viewed as a potential substitute for kava, whether it is a mood-altering socialisation consumable (such as alcohol, marijuana, or kratom), or a health focussed, natural ingredient like those found in calming and sedative teas – valerian root, passionflower etc – which are readily available at supermarkets and health stores.

Any producer of a new novel health trend is a potential new competitive threat to the kava industry. The Blue Pacific's position here is very weak and in need of protection from differentiation. The Regional Kava Development Strategy aims to look into this area to protect kava as a specifically Pacific product.

Kava exporters face widespread competition from kava producers in other Pacific nations. Commercial farming is present in Fiji, Samoa, Tonga, Vanuatu, Papua New Guinea, and other PICTs. Most of these farms supply the large domestic markets, however those wishing to export still face a great deal of competition. Partially due to the reputation of middlemen, many producers want to do it all themselves, reducing the quality of the kava and placing self-imposed restrictions on their commercial export capability due to their more limited total supply capacity.

On a more micro scale, the three to five year grow time means kava farmers cannot enter the market immediately. This presents a time constraint on market entrance for new growers. Many Pacific governments have been supporting kava growing initiatives and the plant is easy to grow. Many households have their own plantations for personal consumption, however the knowledge and financial investment to grow kava in in export quantities at the quality level demanded by consumers is harder to achieve.

Each individual farming household has little bargaining power, as producer/exporters have

ALL CONSIGNMENTS OF FRESH KAVA MUST BE

Intact, sound & clean FREE FROM

- rot, signs of shrivelling & dehydration
- any visible foreign matter
- damage caused by pests affecting the flesh
- abnormal moisture

Able to withstand transportation & handling

Fresh kava **MUST NOT** include flowers, leaves or any other plant parts

Fresh kava **MUST ONLY** be used for human consumption

multiple domestic sources. However, if they were to work as a collective unit, Pacific farming households would have considerable power. Only a few producers are vertically integrated to supply their own kava and importing kava from other countries would be cost prohibitive (although Fiji imports a great deal of kava from Vanuatu).

Gate prices are strongly dependent on natural weather disasters, so farmers have the ability to set much higher gate prices if supply is low. The long grow time also means that if crops are destroyed (or stolen), the unaffected farmers will have higher selling power.

Kava Frequency: Annual

Pacific Island Countries and territories: Fiji

Indicator: Farmgate price

Commodity: Kava

Unit of measure: FJ\$/kg

Time	
2013	25.75
2014	34.5
2015	36
2016	80
2017	71.25
2018	80
2019	95
2020	90
2021	70
Pacific D	ata Hub (SPC)

In New Zealand, the ratio of low-mid quality kava to premium is skewed towards the low quality. The large informal market makes it easy to acquire kava, especially in city centres with a higher population of the Pacific diaspora.

Some commercial buyers of kava estimate that about one in five Pacific households in Auckland import kava for personal use or on-selling from family or friends back in the Islands.

Price Factors

There are several factors that heavily influence prices for kava. Gate prices can be seasonally dependent due to natural disasters and adverse weather conditions, and also due to overall

supply; if supply is limited, kava farmers are able to negotiate higher prices.

Importers can get landed kava for anywhere between NZ\$40 and NZ\$120 per kilogram, depending on the quality of the kava, quantity purchased, country of origin, packaging, and product type. Exporters should note that importers are generally unwilling to buy the standard of kava available at NZ\$40, as their main criteria is quality, and they will not risk their reputation by offering low end kava. For reference, the kava landed at NZ\$120 is premium single origin Vanuatu kava, processed in HAACP* facilities, with excellent packaging. * Hazard Analysis and Critical Control Point

Due to the unregulated nature of the kava industry, prices can be very volatile. Farmers are capable of setting their prices, middlemen frequently take a cut and may not add value, and shipping companies are beginning to charge per kilogram rather than by volume as it has been identified as a high value cargo. Freight in general has increased due to a global economic recession. In addition, informal buyers are able to import up to 15kg without a license, which floods the diaspora market with cheaper, unregulated kava (Elbourne, 2022).

The global average per lb of kava for preparation as a beverage is US\$60.37 retail, as of June 2022 (Kava Forums, 2022).

Key Success Factors

Product Quality

Quality is important for a new exporter seeking industry buy-in. A bad shipment can affect the reputation of not just the buyer, but the kava industry as a whole, therefore it is important to get it right. Improved production and postharvest practices were highlighted as areas which can contribute significantly to better quality; ensuring kava is properly cleaned and dried, tested, and contains only root of noble kava cultivars, specifically a starting combination of kavalactones 2, 4, and 6.

The quality parameters of kava are generally assessed on the following factors:

- Cleanliness: It is of critical importance that the kava has been properly cleaned and dried. Standards for contamination (filth), mould, and moisture are not ubiquitous, so going above and beyond will present the kava product as best quality. Using standard methods, heavy filth will not exceed (a) 0.63% of dry weight basis. Heavy filth exceeding (b) 0.63% but less than 0.7% will be considered to be lower quality. Heavy filth exceeding (c) 0.7% will be rewashed and redried. The ash content should not exceed 6%.
- Hygiene procedures and testing: Methods of sampling and analysis, including determination of moisture content, and the method for determination of kavalactones using the acetone colorimeter method will reassure buyers of the quality of the kava. Moisture content should not exceed 12%.
- Maturity: Though kava can be harvested after three years, the market preference is for five years.

- Texture, colour, and aroma: The colour should be the characteristic light brown/grey colour, while the texture should be consistent in whatever grind has been specified. The aroma should have a similar scent to the plant, with no underlying smells indicating contamination.
- Cultivation method and geographic origin: The condition of the soil the kava is grown in plays a part in determining the overall quality of the kava. Farmers and exporters can improve their soil by increasing overall fertility, using organic processes, and ensuring the kava gets appropriate sunlight and water.

Packaging

When shipping pre-packaged kava for consumer purchase, packaging must be durable enough to handle transit, well-sealed to ensure no moisture can enter, and display the correct information. Informal, tests kava, adds label to vacuum pack at home with ingredients and details, branding

Relationship Building

Building a relationship with the buyer is critical factor for success. Advice from New Zealand importers is to establish a relationship and gradually build your exports, seeking to improve with every shipment.

When sending samples, ensure to send a true representation of your product rather than those you have determined as 'best'. Coordination and communication are important factors required to build a relationship with a commercial buyer. Constant communication and regular market visit can help strengthen the relationship and ensure that a quality product reaches the consumer efficiently.

Marketing & Branding

There are a number of kava products available on the market. It is important for an exporter to identify the target market(s) for each product it offers particularly if the kava is going direct to consumer for consumption, rather than bulk for nutraceuticals.

The packaging especially its appearance and marketing needs to be tailored to suit. Building a recognised and trustworthy brand can be a key comparative advantage when selling a product with little differentiation.

In the competitive market for kava as a beverage,

The Kava Society has successfully positioned itself in the market as a premium kava brand by creating a point of difference. This is a product that shows the power of effective marketing and branding through consistently offering the highest quality product, building a reputation among global seasoned kava drinkers as having good quality and strong kava, and providing knowledge and answers to new drinkers.

Market Entry

In the kava industry, there is a recurring problem of information asymmetry between those who grow and process the product and those who consume it.



Kava bar, Port Vila, Vanuatu. (Photo: PTI NZ.)

Many kava exporters are curious about technical questions regarding kavalactones and chemotypes, but there is little interest in discussing procedures for ensuring that kava is clean. According to New Zealand kava buyers, a kava could contain high kavalactone percentages, but if it is not cleaned and free of microbes, it will not be suitable for discerning kava consumers, which is an apt description of the new kava market.

Many kava farmers are attempting to do everything from growing to processing to exporting. If these different stages were divided more clearly, but in a way that encourages collaboration, the industry would likely benefit greatly. There is a tendency to view processors negatively as middlemen, but this is not always the case. Throughout the kava industry, there are middlemen who do little but clip tickets, which is one of the reasons for the distrust.

The issue of growing and processing kava does need to be addressed, but what really needs attention is providing the general public with accurate information about kava. Many people who are not traditionally kava drinkers are becoming curious about it and will purchase unlabelled and often substandard kava from dairies. Many individuals will inevitably prepare it incor-

rectly and then have a negative experience with kava and never try it again.

Among new demographics of consumers, kava consumption can grow exponentially in New Zealand and abroad, but it must be about education and authentic experiences with high quality kava (Henry, 2022). It has the potential to grow to a number of new markets, and there are many countries where kava is either semi-banned or classified as some type of grey area. If some effort is put forth and proper presentations are made, these bans may be largely overturned.

There is a risk of a global economic recession caused by the pandemic, inflation, and the war in Ukraine, but it is likely to have the greatest impact on those industries viewed non-essential. In view of the economic slowdown, consumer confidence in New Zealand (and across the world) has taken a hit, with 90% of households showing concern and reducing spending, especially in areas such as luxury goods and dining (Scoop, 2022).

With consideration given towards market position, kava exporters can still successfully enter foreign markets and maintain or grow sales. A number of substitute products are available with perceived health benefits at lower prices, such as fruit

	ADVANTAGES	DISADVANTAGES
Direct export	Direct customer contact Higher profit margins Independence from foreign partners	Greater financial risks Investment of time and staff Limited market coverage Insufficient knowledge of market and culture
Indirect export	No or very few extra staff required Agent knows and has access to the market and distribution channels More complete market coverage possible Smaller financial risks	Lower profit margins Dependence on commitment of partner No direct customer contact

juices, vitamin supplements, and alternative products with perceived immune benefits. Kava products can fall within the healthy lifestyle category, though it has less elastic consumer price demand than luxury goods (e.g. jewellery, perfumes).

A customer's perception of utility and relevance plays a significant role in retaining their interest during uncertain economic times. To remain relevant, products must focus on experiences, storytelling around values and purpose, and heritage to maintain authenticity, especially among millennials (Pattuglia, 2016). There is an authentic and original story to be told by the Pacific Island kava industry, and it is functionally unmatched by its competitors. In order to establish awareness and unwavering consumer demand when faced with adverse conditions, it is essential for the kava industry to establish and maintain a visible position within the healthy lifestyle trade.

An importer can be an effective way to enter the New Zealand market for kava, as they possess the necessary infrastructure to ensure that the produce is handled, stored, and distributed in a timely and efficient manner.

Before engaging in discussions with a potential purchaser, it is important to develop a structured approach to the New Zealand market. Identify target market, determine price, and be prepared to present your company to them. Information such as market capacity, processes, packaging, pricing, and marketing are of particular importance. The following information should be readily available when approaching potential importers:

- · Company profile
- Export experience: current export markets if any
- Product specifications covering different varieties available
- Supply capacity: what quantities are available
- Frequency of supply



Kava bar, Port Vila, Vanuatu. (Photo: PTI NZ.)

- Packaging
- Terms of trade (minimum orders etc.)
- Shipping/Freight schedules
- Price of your product range: include any discounts for large orders etc.
- · Business card with a list of all contact details

Once a relationship has been established, it is important to build on it by keeping the buyers informed of what is happening.

Strategic Options

Kava exporters can remain in the domestic market or sell to buyers in other Pacific Island countries. This provides an opportunity to learn product strengths and weaknesses, create connections, and identify possible supply issues while receiving feedback from seasoned kava users.

When it comes to entering the international markets beyond the region, kava farmers and exporters have several options, all with their own strengths and weaknesses. After taking a full analysis of the business and strategic growth plans, the best options for each individual will reveal themselves.

Kava businesses can direct export their products to the end user. This has the benefits of maintain close contact with the customers and allows the exporter full control over brand identity and marketing. For exporters who are willing to invest in e-commerce, training, quality assurance and testing, and have the ability to process cross border payments this may be a good option, especially if the kava is premium and a somewhat limited supply.

On the other hand, the financial risks are greater and not having local knowledge of market, culture, and expectations can slow or halt growth. Most kava exporters who deal with New Zealand on a commercial level use indirect export, through buying agents or distributor.

An experienced third party will take care of the export process which reduces the risk to the exporter. Kava growers and processors are then able to focus on their own business and domestic market without being occupied by new ones. It also requires fewer resources. However, profits are slightly lower as part of the profit margin will be paid to the intermediary, and it limits the connection and feedback from the customer base.

If a kava processor wanted to expand into the nutraceutical market, another option would be to manufacture the products in New Zealand. This saves the cost of transport and the many logistical challenges involved in exporting and provides access to technology and product development expertise that may not be available in the Pacific Islands. However, there are also challenges involved in manufacturing abroad; any legal issues, costs, possible risks, and more. A processor could also export bulk kava for beverages in New Zealand for packaging by New Zealand companies who have the local knowledge about market demands and expectations.

By partnering with an importer or retailer kava exporters would have a steady source of income. This would also have the benefit of access to new knowledge and expertise, greater resources, and be in a stronger position for research and development projects. This also provides a continuous feedback loop on quality. Care must be taken to ensure lines of communication are good, objectives are clear and consistent, and expectations are the same.

Market Opportunities

The creation of value occurs when an existing market is enhanced with actual or perceived benefits. The goal is to create value where none previously existed through enhancements such as product characteristics, desirable certifications, marketing awareness, branding, and preserving the identity of the brand (Parcell, Brees, & Giddens, 2010).

These activities result in higher prices due to increased demand and reduced competition. In general, enhancements that create value are low-risk activities (Parcell et al., 2010). It should be noted that any of the suggestions below may be implemented without substantially disrupting normal business operations, although significant capital investment may be required based on the complexity of the activity.

It is important to note some of the below opportunities require significant research and, in some cases, legislative changes before they are able to be offered to the market. Focusing on improving the quality and reputation of kava is the first step needed, while concurrently working with global regulators to improve market access and opportunities.

Single Origin High Quality Kava

This is the simplest market entry point for exporters. The journey of kava in the international market can be liked to the coffee industry; during the 1950's consumers did not care about where the coffee came from, how it was prepared, or whether it was just basic instant coffee.

Eventually, consumers were educated on coffee and its preparation, and now demand coffee that is premium single origin, fair trade, organic, speciality, etc. People are willing to spend money on a little bit of luxury to start their day, and kava has the potential to be the night-time equivalent. It is, however, imperative that kava farmers and processors lift and standardise the quality of the kava, and regulatory bodies across the Pacific need to ensure they consider the long game rather than going for quick wins (Henry, 2022; Wihongi, 2022; Elbourne, 2022). Importers can play their part in protecting the kava industry by communicating the standards expected by them and their own buyers.

Kava needs to be protected as a Pacific product through appellation of origin; it may only be called kava if it has been grown in the region, as well as restrictions on other countries who are interested in cultivating kava. It can also be protected through IP rights and trade agreements with potential competitor countries.

Shelf Stable Ready to Drink Kava

A New Zealand based business is currently developing a ready-to-drink shelf stable kava as a response to the surging demand for takeaway kava over the New Zealand Covid-19 lockdowns. To comply with current regulations, it must still be purely kava root and water, but

through innovative procedures a shelf-stable product can be achieved. This value-add product would be exportable to New Zealand according to current regulations. Shelf stable kava appeals to new and seasoned kava drinkers as there is no preparation needed. It can help grow the market by being as easy entrance point to kava without inducing any of the possible side-effects of micronized kava.

Nutraceuticals

The nutraceutical is a huge industry that is experiencing significant growth. Individual farmers will not be able to supply the quantity needed for this sector, however if they came together as a cooperative, it may be possible. A cooperative would also reduce the need for middlemen and give farmers stronger negotiating power in terms of price received. Consistency of supply is absolutely key here. It is non-negotiable.

Functional Food and Beverages

While not currently allowable in the New Zealand market, functional foods and beverages containing kava represent an untapped growth potential. Covid-19 has changed the health priorities of many consumers across the globe, leading to innovative development of products that improve brain power, promote relaxation and relieve stress, add healthy microbes to the gut or skin, or provide a caffeine-free energy source.

The market size is estimated to grow to over USD200million by 2030 (Allied Market Research, 2021). Currently, there is no food technology research in New Zealand around the possibilities of kava-added functional foods and beverages (Lee, 2022), though through funding and support this could be an area of development.

Health & Beauty

Health and Beauty represents another category of potential value-add kava products. Some large New Zealand health and beauty companies have shown interest in kava as an ingredient, however further research is needed to determine the safety and efficacy of topical kava. Additionally, import pathways and regulations around the use of kava need to be made clear.

Pet Products

The consumption of supplements is not limited to humans. Pet and livestock nutritional supplements have significant markets, much like human nutritional supplements, but with less regulatory oversight and users who are less sensitive to the unusual flavour of kava.

A market for pet nutritional supplements worth US\$636 million has emerged in recent years, 78% of which is spent on dogs, primarily in the United States. According to recent reports, the

American pet products industry is valued at US\$95

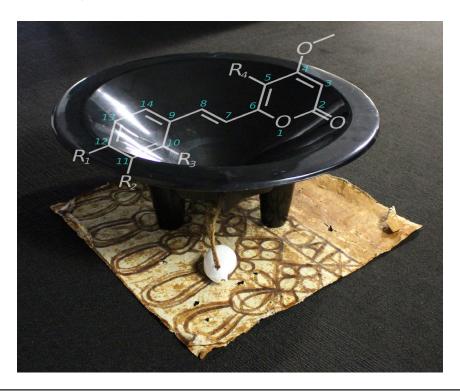
billion, driven primarily by the demand of millennial

consumers (age 25-34), who desire to pamper their 'humanized' pets (American Pet Products Association (APPA), n.d.).

There is now an extensive selection of pet supplement products on the market, ranging from CBD chew toys to intestinal health supplements, strength and endurance products, and other pet vitamins that target specific health conditions like obesity, as well as some that contain kaya

(Packaged Facts, 2019). Interestingly, the United Kingdom currently only allows kava to be imported 'not for human consumption'.

Today, many young pet owners consider what was once considered a luxury to be a necessity (Chapman, 2019). The FDA does not regulate animal nutritional supplements in the United States. However, it does require that the products



meet minimum safety standards and that no specific health benefits be claimed.

A new market has emerged for venture capitalists who specialize exclusively in pet product companies as a result of the popularity of new pet products (Kisaco Research, 2019). Research indicates that the market is expected to grow at a compounded annual rate of 5.26% (Reed, 2017).

Education and Festivals

As the market with highest returns and lowest capital investment is capturing new markets, exporters, importers, and governing bodies could come together to educate consumers on kava. Many first-time or new consumers of kava are unaware of the history, traditions, and preparation practices around kava which would help dispel some of the myths about kava, and experienced kava drinkers can be guided towards premium products that secure the future of the Pacific kava industry. It may also increase future investment and research funding potential and create new traditions that are inclusive of all New Zealanders.

To Summarise

- New Zealand is entirely dependent on supply of kava from the Pacific Islands, as it cannot be grown domestically.
- There is a market for bulk products for nutraceuticals and other value-add products if the volume frequency of supply and, in particular, price is satisfied. It important to clarify the requirements specified by importers to ensure that the proper procedure is followed.
- The general consensus is that **opportunities exist in value added kava products** particularly if a point of difference can be established on the

market. Value added kava products require significant investment in research and analysis, product development, marketing, and packaging to compete effectively on the shelves, as well as ensuring pathways to market exist.

• Organic and the fair-trade market continue to exhibit growth in New Zealand and around the world. With the Pacific Islands' proximity to the market and strong associations with 'natural growing' the Pacific Islands have the potential to leverage these traits to tap into these growth markets.

Quality is key

Some market barriers include the need for further research in order to make claims on labels and to have some information about the health benefits and effects of kava, both as a recreational drink and as a medicine. Processing, analysis, and certification can be costly to start, but is likely to provide much higher returns by increasing consumer confidence and brand loyalty.

Consistent volumes, quality, and packaging have been highlighted by buyers as ones of the main impediments to kava growth, as well as a lack of educational and information for new consumers of kava.

Regional reporting requirements are needed to assess the true economic impact of kava growing and exporting, as data has historically been patchy – with this, exporters are unable to assess true market potential.

Above all, the need for high quality, premium kava products is demanded by New Zealand buyers, and the lack of regional standardisation is hindering the ability for market growth.

References and Further Reading

Abbott P (2016) Kava: A review of the safety of traditional and recreational beverage consumption. Technical report). Rome: Food and Agriculture Organization of the United Nations and World Health Organization.

AddictionResource (2019) Kava drug interactions with kratom, alcohol, or weed. AddictionResource, 15 April. Available at: https://addictionresource.com/drugs/kava/interactions/

American Pet Products Association (APPA). (n.d.). Pet Industry Market Size & Ownership Statistics. Retrieved June 14, 2020, from american pet products.org website: https://www.americanpetproducts.org/press_industrytrends.asp

Aporosa SA (2017a) Kava (Piper methysticum): Demythifying the Pacific's cultural keystone species. Tālanga Seminar Series. University of the South Pacific, Tonga, 12 October. Available at: https://researchcommons.waikato.ac.nz/handle/10289/12255.

Aporosa SA (2019a) Australia's discussion of kava imports reflects lack of cultural understanding. The Conversation, 9 June. Available at: https://theconversation.com/australias-discussion-of-kava-imports-reflects-lack-of-cultural-understanding-115662.

Aporosa SA (2019b) Kava and ethno-cultural identity in Oceania. In: Ratuva S (ed.) The Palgrave Handbook of Ethnicity. Chapter 134-1. London: Springer-Nature, pp. 1–15.

Aporosa SA. (2019) De-mythologizing and re-branding of kava as the new 'world drug' of choice. Drug Science, Policy and Law. January 2019.

Aporosa, SA (2015) The new kava user: Diasporic identity formation in reverse. New Zealand Sociology 30: 58–77

Aporosa, SA (2017b) Understanding cognitive functions related to driving following kava (Piper methysticum) use at traditional consumption volumes. Journal of Psychopharmacology 31(Suppl.): A84.

Aporosa, SA. (2022, March 4). (E. Callister, Interviewer)

Aronson, JK (2008) Meyler's Side Effects of Herbal Medicines, Amsterdam: Elsevier.

 $Basit\,M\,(2016)\,The\,truth\,about\,kava.\,The\,California\,Aggie,\,22\,November.\,Available\,at:\,https://theaggie.org/2016/11/21/the-truth-about-kava/.$

BePure (2022, April 12). (E. Callister, Interviewer)

Bian T; Corral et al (2020). Kava as a clinical nutrient: Promises and challenges. Nutrients. Retrieved December 21, 2021, from https://pubmed.ncbi.nlm.nih.gov/33027883/

Bilia, AR, Gallori, S, Vincieri, FF (2001) Kava-kava and anxiety: Growing knowledge about the efficacy and safety. Life Science 70: 2581–2597.

Blades J (2016) Increasing interest in kava for reducing anxiety. Radio New Zealand: Dateline Pacific, 7 December. Available at: www.radionz.co.nz/international/programmes/datelinepacific/audio/201826812/increasing-interest-in-kava-for-reducing-anxiety.

Blades J (2018) Pacific countries to promote kava as food product. Radio New Zealand: Dateline Pacific, 19 November. Available at: www.radionz. co.nz/international/programmes/datelinepacific/audio/2018671657/pacific-countries-to-promote-kava-as-food-product.

Braun L and Cohen M (2010) Herbs and natural supplements: An evi-

dence-based guide. Chatswood: Elsevier Australia.

Cagnacci, Angelo & Arangino, Serenella & Renzi, Antonietta & Zanni, Anna & Malmusi, Stefania & Volpe, Annibale. (2003). Kava-Kava administration reduces anxiety in perimenopausal women. Maturitas. 44. 103-9. 10.1016/S0378-5122(02)00317-1.

Catherall, S. (2020, March 24). The growing sober-curious movement: We talk to two women who've chosen the alcohol-free road. Now To Love. Retrieved August 2, 2022, from https://www.nowtolove.co.nz/health/diet-nutrition/sober-curious-movement-alcohol-free-44614

Celentano, A.; Tran, A.; Testa, C.; Thayanantha, K.; Tan-Orders, W.; Tan, S.; Syamal, M.; McCullough, M.J.; Yap, T. The protective effects of Kava (Piper methysticum) constituents in cancers: A systematic review. J. Oral Pathol. Med. 2019, 48, 510–529

Chand, S. (2022, April 6). (E. Callister, Interviewer)

Chapman, G. (2019). Vitamins and supplements for dogs and cats are a huge business - Vox. Retrieved June 14, 2020, from Vox website: https://www.vox.com/the-goods/2019/8/12/20799061/petsupplement-industry-vitamins-dogs-cats

Churchill W (2010) Samoan Kava Custom (1916). Whitefish, MT: Kessinger Legacy Reprints.

Corcuran M and Brynjolffssen S (2008) The root of Vanuatu's happiness. ABC Australia and Journeyman Pictures, 8 September. Available at: www.journeyman.tv/film/4270/kava-culture.

Dreaver B (2016) Thousands drinking kava in NZ, but is it a cure or a killer? OneNews, TVNZ, 25 August. Available at: www.tvnz.co.nz/one-news/new-zealand/thousands-drinking-kava-in-nz-but-cure-killer.

Elbourne, P. (2022, January 28). (E. Callister, Interviewer)

Fiji Ministry of Agriculture (2017) The Fiji Kava Standard 2017. Pacific Community SPC. Retrieved July 24, 2022, from http://pafpnet.spc.int/attachments/article/780/Fiji-Kava-Standard-2017.pdf

Fiji Ministry of Agriculture. (2017). Fiji Kava Quality Manual . Pacific Community SPC. Retrieved February 24, 2022, from https://pafpnet.spc.int/attachments/article/779/Fiji-Kava-Quality-Manual.pdf

Fiji Ministry of Agriculture. The Fiji Kava Standard. Pacific Horticulture & Agriculture market Access Program: Pacific Horticulture & Agriculture market Access Program 2017. https://phamaplus.com.au/wp-content/up-loads/2017/03/Fiji_Kava_Standard_ecopy.pdf (accessed July 2021).

Final Adoption of Codex Texts. Codex Alimentarius Commission. (2020, July). Retrieved August 2, 2022, from https://www.fao.org/fao-who-codex-alimentarius/en/

Functional beverages market size, share: Industry Report, 2030. Allied Market Research. (n.d.). Retrieved August 2, 2022, from https://www.alliedmarketresearch.com/functional-beverages-market-A13087#:~:text=The%20functional%20beverages%20market%20size,probiotics%20 and%20some%20artificial%20ingredients.

Garae L (2017) Kava banned in Poland. Vanuatu Daily Post, 27 December. Available at: http://dailypost.vu/news/kava-banned-in-poland/article_845575d3-6dd0-5c03-a1c4-e0720c868a7a.html.

Garae L (2018) Poland relegalises kava. Vanuatu Daily Post, 4 September.

Available at: http://dailypost.vu/news/poland-relegalises-kava/article_d2cc4504-c426-53f3-98f9-e87934fddbc9.html.

Geier, FP, Konstantinowicz, T (2004) Kava treatment in patients with anxiety. Phytotherapy Research 18: 297–300.

Government of Tonga. Tonga Kava Quality Standard. Pacific Horticulture & Agriculture market Access Program: Pacific Horticulture & Agriculture market Access Program 2020. https://phamaplus.com.au/wp-content/uploads/2020/06/Tonga_Kava_Quality_Standard_Final_e-copy-1.pdf (accessed July 2021).

Government of Vanuatu (GoV) (2002) Kava Act No. 2. Government of the Republic of Vanuatu. Available at: www.paclii.org/vu/legis/num_act/ka200252/.

Graziano, S, Orsolini, L, Rotolo, MC, et al. (2017) Herbal highs: Review on psychoactive effects and neuropharmacology. Current Neuropharmacology 15: 750–761.

Heaton, T. (2021, August 29). Kava: The Pacific's economic 'diamond' is being coveted by competitors. Honolulu Civil Beat. Retrieved August 2, 2022, from https://www.civilbeat.org/2021/08/kava-the-pacifics-economic-diamond-is-being-coveted-by-competitors/

Henry, T. (2022, January 20). (E. Callister, Interviewer)

Kava addiction and abuse. Addiction Center. (2021, November 2). Retrieved August 2, 2022, from https://www.addictioncenter.com/drugs/over-the-counter-drugs/kava-addiction-abuse/

Kava Forums. (n.d.). Retrieved August 2, 2022, from https://kavaforums.com/forum/

Kava root extract market size, share & covid-19 impact analysis, and Regional Forecast, 2022 – 2029. Kava Root Extract Market Size, Share, Growth | Forecast [2029]. (2021). Retrieved August 2, 2022, from https://www.fortunebusinessinsights.com/kava-root-extract-market-103694

Kava. Restorative Medicine. (n.d.). Retrieved August 2, 2022, from https://restorativemedicine.org/library/monographs/kava/

Kisaco Research. (2019). Pets and Money 2019. Retrieved June 14, 2020, from Pets and Money Summit website: https://www.petsandmoneysummit.com/events/pets-and-money-2019

Kuchta, K, Schmidt, M, Nahrstedt, A (2015) German kava ban lifted by Court: The alleged hepatotoxicity of kava (Piper methysticum) as a case of ill-defined herbal drug identity, lacking quality control, and misguided regulatory politics. Planta Medica 81(18): 1647–1653.

Lal, N. (n.d.). Pacific kava production, trade and consumption: Gaps in data hinder full analysis. Pacific kava production, trade and consumption: Gaps in data hinder full analysis | Statistics for Development Division. Retrieved January 12, 2022, from https://sdd.spc.int/news/2021/10/20/pacific-kava-production-trade-and-consumption-gaps

Lebot V (1991) Kava (Piper methysticum Forst. f.): The Polynesian dispersal of an Oceanian plant. In: Cox PA and Banack SA (eds) Islands, Plants, and Polynesians: An Introduction to Polynesian Ethnobotany. Portland, OR: Dioscorides Press, pp. 169–201.

Lebot, V, Cabalion, P (1988) Kavas of Vanuatu: Cultivars of Piper methystic-um Frost, Noumea: South Pacific Commission.

Lebot, V, Levesque, J (1989) The origin and distribution of kava (Piper methysticum Frost. f., Piperaceae): A phytochemical approach. Allertonia 2: 223–281

Lebot, V, Merlin, M, Lindstrom, L (1997) Kava, the Pacific Elixir: The Definitive Guide to its Ethnobotany, History and Chemistry, Rochester, VT: Healing Arts Press.

Lee, SJ. (2022, February 23). (E. Callister, Interviewer)

Lemert, EM (1967) Secular use of kava in Tonga. Quarterly Journal of Studies on Alcohol 28: 328–341.

Lim, TK (2016) Edible Medicinal and Non-medicinal Plants: Volume 11, Modified Stems, Roots, Bulbs, New York, NY: Springer.

Malani J (2002) Evaluation of the effects of kava on the liver. Report, 12 March. Suva: Fiji School of Medicine.

Ministry for Primary Industries. (2022, January 17). Ministry for Primary Industries. Retrieved August 2, 2022, from https://www.mpi.govt.nz/

Research and Markets. (2021, January 11). Global Functional Beverages Market Report 2020: CBD-infused functional drinks gaining momentum - forecast to 2030. Global Functional Beverages Market Report 2020: CBD-Infused Functional Drinks Gaining Momentum - Forecast to 2030. Retrieved August 2, 2022, from https://www.prnewswire.com/news-releases/global-functional-beverages-market-report-2020-cbd-infused-functional-drinks-gaining-momentum---forecast-to-2030-301205211.html

Markham, R. (2022, February 3). Promoting kava exports, ignoring sustainability. Devpolicy Blog from the Development Policy Centre. Retrieved August 2, 2022, from https://devpolicy.org/promoting-kava-exports-ignoring-sustainability-20220124/

Marriner, C. (2022, March 13). Ex-cop wins Fulbright to study how kava could treat PTSD. NZ Herald. Retrieved August 2, 2022, from https://www.nzherald.co.nz/talanoa/waikato-researcher-dr-apo-aporosa-wins-fulbright-to-study-kava-as-treatment-for-post-traumatic-stress-disorder/BPDW53XZ2UKASDA6O2KTHQV2YI/

Martin, A.C.; Johnston, C.X.; Hegeman, A.D. Measuring the chemical and cytotoxic variability of commercially available kava (Piper methysticum G. Forster). PLoS ONE 2014, 9, e111572.

Ministry for Primary Industries. (n.d.). Stored plant products for human consumption (SPP.HUMAN.IHS) - import health standard [PDF, 574 KB]. Ministry for Primary Industries. Retrieved August 2, 2022, from https://www.mpi.govt.nz/dmsdocument/1663-stored-plant-products-intended-for-human-consumption-import-health-standard

Monitoring and evaluation of the Kava Importation Pilot. Ninti One. (2021, August 26). Retrieved August 2, 2022, from https://www.nintione.com.au/project/monitoring-and-evaluation-of-kava-pilot/

New Zealand consumer spending tightens in the wake of covid-19 and inflation concerns. Scoop. (2022, July 28). Retrieved August 2, 2022, from https://www.scoop.co.nz/stories/BU2207/S00416/new-zealand-consumer-spending-tightens-in-the-wake-of-covid-19-and-inflation-concerns. htm

Norton, SA, Ruze, P (1994) Kava dermopathy. Journal of the American Academy of Dermatology 31: 89–97.

NZ Post. (2022). Kiwis spend \$7.67 billion online in 2021. Kiwis spend \$7.67 billion online in 2021. Retrieved August 2, 2022, from https://www.nzpost.co.nz/about-us/media-centre/media-release/kiwis-spend-767-billion-online-in-2021

Pacific Community (SCP). (n.d.). Kava Data. Pacific Data Hub. Retrieved August 2, 2022, from https://stats.pacificdata.org/vis?lc=en&df%5Bds%5D=ds%3ASPC2&df%5Bid%5D=DF_KAVA&df%5Bag%5D=SPC&df%5Bvs%5D=1.0&dq=A...121190&pd=2013%2C2021&ly%5Bcl%5D=TIME_PERI-OD&ly%5Brw%5D=INDICATOR&hc%5BCommodity%5D=Kava&tm=kava&pg=0

Parcell, J., Brees, M., & Giddens, N. (2010). Capturing vs. Creating Value. Retrieved June 7, 2020, from Ag Decision Maker website: https://www.extension.iastate.edu/agdm/wholefarm/html/c5-05.html

Pattuglia, Simonetta & Mingione, Michela. (2016). Towards a new understanding of brand authenticity: seeing through the lens of Millennials. 10.7433/SRECP.FP.2016.29.

Pet Nutrition Alliance. (n.d.). How are dietary supplements for animals regulated? Retrieved June 14, 2020, from petnutritionalliance.org website: https://petnutritionalliance.org/site/pnatool/how-aredietary-supplements-for-animals-regulated/

Procyk A and Lebot V (2013) Scientific Evidence does not Support Claims of Kava Toxicity. YouTube: The Vanuatu Department of Agriculture, 16 August. Available at: www.youtube.com/watch?v=aNRURSEuatU.

Rankin, P. (2022, January 26). (E. Callister, Interviewer)

Reed, C. (2017). The Growing Pet-Supplements Market. Retrieved June 14, 2020, from Nutritional Outlook website: https://www.nutritionaloutlook.com/weight-management-nutrition/growing-petsupplements-market

Richardson WN, Henderson L. The safety of kava: a regulatory perspective. Br J Clin Pharmacol. 2007 Oct;64(4):418-20. doi: 10.1111/j.1365-2125.2007.02933.x. Epub 2007 Jul 4. PMID: 17610532; PMCID: PMC2048547.

Rowe A, Ramzan I. (2012) Are mould hepatotoxins responsible for kava hepatotoxicity? Phytother Res 2012; 26: 1768–70. https://doi.org/10.1002/ptr.4620.

Samoa 'Ava Standard. Pacific Horticulture & Agriculture market Access Program: Pacific Horticulture & Agriculture market Access Program 2018. https://phamaplus.com.au/wp-content/uploads/2018/06/Samoa_Ava_Standard-English-Final_ecopy.pdf (accessed July 2021).

Sarris, J, Stough, C, Bousman, CA, et al. (2013) Kava in the treatment of generalized anxiety disorder: A double-blind, randomized, placebo-controlled study. Journal of Clinical Psychopharmacology 33: 643–648.

Schmidt M (2014) German Court ruling reverses kava ban; German Regulatory Authority appeals decision. HerbalEGram, p. 11. Available at: http://cms.herbalgram.org/heg/volume11/07July/GermanKavaBanReversal.html?ts=1443080085&signature=4a90e6b17036bdef1912cdf1d6eb19c3.

Showman, AF, Baker, JD, Linares, C, et al. (2015) Contemporary Pacific and Western perspectives on 'awa (Piper methysticum) toxicology. Fitoterapia 100: 56–67.

Singh, YN (2009) Kava: An old drug in a new world. Cultural Critique 71: 107–128.

Standard 2.6.3 – kava – food standards (proposal p1025 – code revision) variation-Australia New Zealand Food Standards Code – Amendment No. 154 - 2015-GS1906 - New Zealand Gazette. New Zealand Official Crest. (n.d.). Retrieved August 2, 2022, from https://gazette.govt.nz/notice/id/2015-gs1906

Stats NZ. Home | Stats NZ. (n.d.). Retrieved August 2, 2022, from https://www.stats.govt.nz/

Steiner, GG (2001) Kava as an anti craving agent: Preliminary data. Pacific Health Dialog 8: 335–339.

Stolerman, IP (2010) Encyclopedia of Psychopharmacology, Heidelberg: Springer-Verlag.

The history of Kava origins: Kava drink history. Kalm with Kava. (2022, January 27). Retrieved August 2, 2022, from https://kalmwithkava.com/history-of-kava/

The Kava Act 2002. Republic of Vanuatu. Port Vila. Commencement (2008). https://biosecurity.gov.vu/images/Export/kava-act-2002.pdf (accessed July 2021).

The National Quality Standard for Kava Export. Vanuatu. Pacific Horticulture & Agriculture market Access Program: Pacific Horticulture & Agriculture market Access Program 2017. https://phamaplus.com.au/wp-content/uploads/2017/07/Vanuatu_Quality_Standard_ecopy.pdf (accessed July 2021).

Thompson, R, Ruch, W, Hasenohrl, RU (2004) Enhanced cognitive performance and cheerful mood by standardized extracts of Piper methysticum (Kava-kava). Journal of Human Psychopharmacology Clinical and Experimental 19: 243–250.

Thomsen M, Schmidt M. Health policy versus kava (Piper methysticum): Anxiolytic efficacy may be instrumental in restoring the reputation of a major South Pacific crop. J Ethnopharmacol. 2021 Mar 25;268:113582. doi: 10.1016/j.jep.2020.113582. Epub 2020 Nov 12. PMID: 33189846.

Wihongi, T. (2022, April 8). (E. Callister, Interviewer)

Williams, Z. (2021, December 10). What are Google's New Core Web Vitals & December 10). What are Googl

Wolinski C (2018) This ancient South Pacific sipper is officially trending. VinePair, 21 March. Available at: https://vinepair.com/articles/what-kava-kava-drink/

Wyllie, G. (2022, February 28). (E. Callister, Interviewer)



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