

THE SECRET INGREDIENT

An environmentally disastrous ingredient is slipping under the radar and into our everyday shopping. Can we put an end to this destructive practice, asks **Rachel Croft**



CALL IT the Global industries' go-to vegetable oil. Cheap, versatile, high yielding^[2]- no wonder palm oil is the most popular choice for producers and manufacturers alike. So, why should we care? The heart of the matter is the environmentally devastating deforestation associated with palm oil plantations, and the many social and ecological concerns associated with it.

But just how much do you think you consume? You might be surprised that palm oil is actually contained in over 50% of our household products, including confectionary, cosmetics, baked goods and cleaning products^[11]. But how can this be happening without our knowledge? Incredibly, in many countries including the UK, there is no law on the compulsory labelling of palm oil, which results in the ingredient sneaking in under more than 170 names^[11] (try Sodium Lauryl Sulfate or Glyceryl Stearate for size).

The Slippery Slope

The biggest producers of palm oil are Indonesia and Malaysia; home to lowland tropical rainforest habitats containing some of the highest concentrations of endemic species in the world^[3]. Some campaigners claim that in 15 years, just 2% of these countries rainforests will remain unless immediate action is taken to reduce deforestation^[4]. Evidence strongly suggests that the driving force behind this is palm oil. A study by Koh and Wilcove^[5] analysing land-cover data from the United Nations FAO found that 55%–59% of oil palm expansion in Malaysia, and >56% expansion in Indonesia from 1900 occurred at the expense of the both pristine rainforest and logged forests.

Sadly, things are only getting worse. Indonesia alone currently has over 9 million hectares of plantations, which produces 21 million tonnes of crude palm oil annually^[6], and have set a target to double that by 2020 ^[7]. Though the Government has some procedures in place to protect the forests such as environmental impact assessments, evidence has emerged which suggests that this is largely ignored by industries^[1], resulting in the illegal use of fires, clearing forest before permits were given, and removal of peat. Strong evidence of corruption in law and lack of enforcement means the judicial system is ineffective^[6] meaning unsustainable practices continue unchecked today. >

Increasing global demand for vegetable oils



There has been a steady growth in demand for palm oil in recent years, with no signs of slowing

"In as little at 15 years, just 2% of the rainforests of these two countries will remain."

Nowhere left to run

Oil palm plantations have been shown to support far fewer species than native forests and other tree crops^[8].

Orangutans are a prime example; in 1900 there were 315,000 wild individuals, but today there are fewer than 50,000, crammed into increasingly fragmented forest^[4]. Orangutans need large areas of rainforest in order to feed, and as a result are excellent seed dispersers, providing a huge range of environmental services to humanity^[9]. Both species are endangered according to the IUCN^[9], many killed for meat or to protect the palm oil crops^[9], while others starve as a result of the

Alternatives just can't match up to cheap and efficient palm oil

conversion to monocultures. The species could be driven to extinction within 12 years unless the devastation of their natural habitat is halted^[4].

It isn't just Orangutans suffering. Studies using data on butterfly and bird diversity in forests Malaysia suggest that conversion of forests to oil palm plantations may result in significant losses in biodiversity^[5]. Tropical rainforests are goldmines of medicinal potential and have been little explored in this respect. Vast clearing means that many species could have become extinct before discovery, destroying this bank of unbelievable potential for short term gain. People and Planet Abused

The emergence of palm oil production in Indonesia in the 1950s was at the time a godsend, alleviating poverty in rural areas^[10]. Today casts a very different picture; small holder farmers have become trapped in exploitive relationships with industry giants at the cost of human rights and exploitation of vulnerable groups. Women and children are often worst affected^[6]. Communities and indigenous people who rely on the forests for hunter-gathering have been

abused by illegal land grabbing, and are denied legal remedies^[6].

The soil structure and morphology is also abused by mechanised deforestation, as the bare soil is

easily washed away, clogging up watercourses or releasing huge amounts of the carbon stored within it^[6]. The clearing and draining of an area to make room for plantations involve the use of fires, which greatly increase the amount of carbon released from peat soils^[6]. It doesn't end there. Fertilizers are applied twice a year to the plantations, but inaccurate application combined with sludge-like waste from the processing mills have a huge impacts watercourses as both as are deoxygenating^[11].

Time for change

Though palm oil has currently got Southeast Asian rainforest in its greasy grip, thankfully things are starting on the gradual path to change.

Sustainable palm oil now accounts for $\sim 14\%$ of global production, thanks to the certification by the Roundtable on Sustainable Palm Oil (RSPO), established in 2003. It involves members including growers, manufacturers, retailers and NGOs^[12]. Certified sustainable palm oil is from plantations which have been independently examined and found to comply with globally agreed environmental standards devised by the RSPO^[4].

The only current issue is that the organisation is considered unreliable by some^[1] due to problems regarding the implementation of the RSPO's principals concerning human rights, land use and biodiversity issues^[2]. That being said, the RSPO has already improved the industry through set definitions for sustainability, developing stakeholder engagement processes and a sciencebased research programme to improve oil production^[2]. In 2011, the RSPO officially released its trademark, allowing stakeholder

engagement processes and a science-based research pro-gramme to improve cite

As a result of the increasing global awareness of unsustainable palm oil, the fo-

cus of palm oil in Malavsia has begun to shift to meet universally accepted sustainability standards [13]

But so far, though many retailers and manufacturers in the countries including the UK have made strong commitments to using certified sustainable palm oil, many have delayed even as sufficient quantities became available [2]

People Power

Pressure on companies can make a huge difference- no longer should we tolerate being misguided by vague product labelling. The easiest way is to speak out with your wallet, and buy products which are free from unsustainable palm oil. The list at the end of this article contains some common ingredients which are often other names for palm oil for you to look out for. Look out for eco-labels like the RSPOs- vou can make a difference tomorrow by choosing wisely today.

The Alter-egos of Palm Oil

Vegetable Oil Veqetable Fat Sodium Laureth Sulfate, Sodium Lauryl Sulfate Sodium Dodecyl Sulphate Palm Kernel Palm Oil Kernel Palmate Palmitate Palmolein Stearic Acid Elaeis Guineensis Palmitic Acid Palmitoyl tetrapeptide-3 Steareth -2 Steareth -20 Sodium Kernelate Sodium Palm Kernelate Sodium Lauryl Lactylate/Sulphate Sodium Lauryl Sulfoacetate Hyrated Palm Glycerides Sodium Isostearoyl Lactylaye



RSPO trademark