Sorghum, its Proteins and Thai Lime

Shouldn't the Use of *Kaffir, Kafir, Kaffirin* and *Kafirin* as Common Nouns be Discontinued?

Komeine Nantanga
Department of Food Science and Systems, University of Namibia

Romie Nghitevelekwa
Department of Social Sciences, University of Namibia

Werner Embashu
Centre for Research Services, University of Namibia

Martha Shikongo-Nambabi
Department of Food Science and Systems, University of Namibia

It is trite that most Indigenous food resources in former politically colonised nations have been given English or some other Western common or trivial names. The oppressed people especially in southern Africa were not spared from derogatory and/or racist names such as *Kaffir* or *Kafir*, a derogatory reference name equivalent to Nigga or Negro that was used in America. Over time and as political freedom and independence were gained through liberation struggles between the colonisers and the colonised, the use of derogatory and/or racist names against the formerly oppressed people became legally actionable. It is almost forgotten that the offensive, derogatory and/or racist names were not limited to the oppressed people. The natural environments, land and other resources such as Indigenous plants, fruits, rivers, serene spaces and animals were also apparently named by the colonisers and Western botanists or those who allegedly discovered these resources, even though the Indigenous names for such resources existed before the arrival of different agents of colonialisation.

Although, human society in general has learnt to no longer use racist and/or derogatory words such as Negro, Nigga, *Kaffir* or *Kafir* as common names or nouns, the scientific community seems to lag behind. Some questions arise such as has the scientific community learnt this lesson? Have scientific communications and their related communication platforms such as editors and publishers learnt this lesson?

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From literature, the use of racist, derogatory words such as Negro, Nigga, *Kaffir* or *Kafir* as common names or nouns had seemingly ended. However, this piece points out that there is continued use with ease, of the words *Kaffir*, *Kafir* and their derivatives, *Kaffirin* and *Kafirin* as nouns especially in the scientific databases, as recently as in journal articles published in 2022. This is especially evident in relation to Thai lime, Sorghum cereal grain and its alcohol-soluble proteins. With the onset of decolonisation and a move towards equitable science and academia, this piece aims to highlight the need for researchers and scientists, publishers and authors to be sensitive against the continued use of derogatory and/or racist names for Indigenous food resources. While there are many Indigenous food resources' names that warrant to be decolonised of their derogative names, this piece focuses on Sorghum and Thai lime as examples. The argument of this contribution is not dissimilar to the context of the current Black Lives Matter movement. Science and academia must not simply note, but must act (Nature, 2020)! This is therefore a call to action on the decolonisation of specific names by the scientific community. One of the impactful and direct actions is for scientists and allied professionals in the editorial and publications platforms to be vigilant and not allow the use of racist words as common names. This article essentially calls for just that (the discontinuation of the use of racist, derogatory words as common names). Finally, it proposes the use of *Sorghumins* instead of *Kaffirins* or *Kafirins* in reference to alcohol-soluble proteins (prolamins) of Sorghum.

Why the Continued and Persistent Use of *Kaffir*, *Kafir*, *Kaffirin* or *Kafirin* as Common Nouns?

Kaffir or *Kafir* is a derogatory and racist word (Williams, 2015) especially in southern Africa (particularly Namibia and South Africa). With the independence of Namibia in 1990 and the subsequent South Africa political uhuru in 1994, the use of this derogatory and racist reference name towards people became legally prohibited. In this context, the use of *Kaffir* or *Kafir* as a reference name towards food resources in this case Sorghum ought to have been discontinued and could just be limited to the publications prior to 1994, which marked the end of the racist apartheid system. It goes without saying that science hardly listened, learnt and definitely barely changed. The word *Kaffir* and/or *Kafir* is still in use especially by scientists as per the quick scan of a few databases to illustrate the observation (Table 1).

Publications that pertain to especially food resources such as the cereal grain Sorghum (*Sorghum bicolor*) have continued to use *Kaffir* or *Kafir* corn. Some of its proteins are thus seemingly derivatively named as *Kaffirin*s or *Kafirin*s (Johns & Brewster, 1916). Thai lime (*Citrus hystrix*) is also prevalently called *Kaffir* lime in literature. It is important to bear in mind that the mere appearance of these terms in literature does not necessarily suggest that the author(s) endorsed their use. Our contention is, however, premised on the fact that these ethically questionable and racist words are still commonly used to identify Sorghum or Sorghum proteins or Thai lime. The use of racist words as common names raises questions regarding the scientific community, publications editors and reviewers included on the sensitivity of the use of inclusive language.

Table 1 The least number of publications since 1994 (accessed on 26 July 2022) in which *Kaffir* and *Kafir* as well as *Kafirin* and *Kafirin* (and/or their respective plural forms) appear.

Database	*Kaffir and Kafir*	*Kaffirin and Kafirin*
Sciencedirect	380	650
PubmedCentral	78,000	300
Taylor and Francis Online	240	50
Wiley Online Library	440	210

Context Matters

It is important to bear in mind that the appearance of these terms alone does not mean automatically that the author endorses their use with any ill intention. Consider for example this article. It uses the words, even though it is calling for their usage to be discontinued. However, this contribution's context is rooted in the nonchalant uses of derogatory and racist names and their derivatives such as those attached to Sorghum, Sorghum beer, Thai lime and some trees as it appears in the following illustrative references. In some of the publications, the derogatory names are used as nouns, in non-title parts of the write-up, whereas for others, the derogatory names are used as common nouns, carelessly located in the titles of the publications. The latter places the referencing of these publications with credible scientific value about Sorghum, its beers and Thai lime in a dilemma. It should be noted that the prevalence of use of the *Kaffir*, *Kafir*, *Kaffirin* or *Kafirin* appears in African and international publications. It also spans across fields such as culinary, cultural, medicinal, microbiology, plant and cereal sciences, food science, agriculture, chemistry, processing technology and nutrition, animal and livestock sciences.

For illustrative purposes and without any ill intention against any of the authors from diverse fields, institutions and continents, the following references, listed in no particular order, can serve to highlight the continued use of derogatory *Kaffir* and *Kafir* or any of their variations in the content and/or title (the bolding of the derogatory word does not appear in the original title):

1. Anuchapreeda, S., Anzawa, R., Viriyaadhammaa, N., Neimkhum, W., Chaiyana, W., Okonogi, S. & Usuki, T. (2020). Isolation and biological activity of agrostophillinol from **kaffir** lime (*Citrus hystrix*) leaves. Bioorganic & Medicinal Chemistry Letters, 30(14), 127256.
2. Singh, A., Gupta, R., Tandon, S. & Pandey, R. (2018). Anti-biofilm and anti-virulence potential of 3, 7-dimethyloct-6-enal derived from *Citrus hystrix* against bacterial blight of rice caused by *Xanthomonas oryzae* pv. oryzae. Microbial Pathogenesis, 115, 264–271.
3. Anuchapreeda, S., Chueahongthong, F., Viriyaadhammaa, N., Panyajai, P., Anzawa, R., Tima, S. … & Okonogi, S. (2020). Antileukemic cell proliferation of active compounds from **kaffir** lime (*Citrus hystrix*) leaves. Molecules, 25(6), 1300.

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10. Eburuche, O. B., Attaugwu, R. N., Ufondu, H. E. & Uvere, P. O. (2019). Composition and hardness of malting red and white **kaffir** Sorghum [Sorghum bicolor (L.) Moench] dried under the sun. Journal of Food Science and Technology, 56(7), 3513–3523.
11. Chilton, S. N., Burton, J. P. & Reid, G. (2015). Inclusion of fermented foods in food guides around the world. Nutrients, 7(1), 390–404.
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18. Pandian, B. A., Sexton-Bowser, S., Prasad, P. V. & Jugulam, M. (2022). Current status and prospects of herbicide-resistant grain Sorghum (*Sorghum bicolor*). Pest Management Science, 78(2), 409–415.

Regarding *Kaffirin* and/or *Kafirin* and/or *Kaffirins* and/or *Kafirins* the following references can serve to highlight their continued use. This is purely for illustrative purposes, in no particular order and with no ill intentions against any of the authors from diverse fields, institutions and continents (the bolding of the derogatory word does not appear in the original title).

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Cereal grains contain alcohol-soluble proteins (prolamins) generally grouped as prolamins. The prolamins of the major cereals have trivial names derived from the genus name of the cereal (Table 2). For instance, maize or corn prolamins are known as Zeins. This is derived from its genus name, Zea. The prolamins protein fraction of Sorghum, which was derogatorily and/or racially named by colonisers as *Kaffir* corn or *Kafir* corn are referred to as *Kaffirins* or *Kafirins*. *Kaffir* or *Kafir* are doubtlessly offensive, derogatory and racist words (Williams, 2015). This warrants the question: why are these still in continued use as common names especially in scientific publications?

Decolonise Sorghum, its Proteins and Thai Lime

Science must listen attentively, learn faster and take prompt action towards positive change, respect for all people, avoidance of offensive and exclusionary terms. On the common use of derogatory and/or racist terms, scientists, researchers, academia, publishers, editors and database-holders in several fields must respectfully act and stop the perpetual use of the racist words that henceforth ought to belong in the archives only.

It is our considered submission that the alcohol-soluble proteins of Sorghum should be renamed. We thus suggest the use of the word *Sorghumin* in place of *Kaffirin* or *Kafirin*. The use of *Kafir* or its variation as one of the Sorghum race or species must also be reconsidered. Thai lime can simply be referred to as such and the use of the Kaffir or Kafir as part of its common names can be discontinued.

Table 2 Names of alcohol-soluble proteins of major cereal grains.

Cereal Grain	Scientific name	Name of alcohol-soluble proteins
Corn	***Z****ea mays*	**Ze**in
Rice	***Oryz****a sativa*	**Oryz**in
Wheat	*Triticum aestivum*	Gliadin
Barley	***Horde****um vulgare*	**Horde**in
Oats	***Aven****a sativa*	**Aven**in
Sorghum (*Kaffir* corn or *Kafir* corn)	*Sorghum bicolor*	*Kaffirin* or *Kafirin*
Rye	***Secal****e cereale*	**Secal**in

DECLARATIONS

None

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