kofflerarts

Giselle Beiguelman



cover Wandering

Image created with artificial intelligence (Style GAN2)

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Foreword
Introduction4
Botannica Tirannica: in search of a wandering ecosystem for a mutatis mutandis world6
Dr. Jonathan Ferrier
Isaac Crosby
Wandering
Flora Mutandis
Flora Rebellis41
The Garden of Resilience
Specimens
Wild Flowers of Canada 59
Soundscape 60
Poisonous, Noxious and Suspicious 61
Taxonomy is a Technology of Power 67
A Genealogy of Prejudice
Every Weed is a Rebellious Being

Foreword

The Museu Judaico de São Paulo and Koffler Arts are more similar than a first glance might reveal. While the former is housed in a deconsecrated synagogue, holds historical collections of Judaica, and maintains the largest Jewish archive in Brazil, it also presents exhibitions of modern and contemporary art and seeks to connect people from all cultural backgrounds to deepen understanding of how our differences can be a source of strength. Koffler Arts, whose gallery space is situated in a former public school, has put particular focus on contemporary art which often reassesses history or examines complex issues through multiple perspectives, stimulating intercultural dialogue and positioning Jewish identity in conversation with global voices.

Botannica Tirannica by award-winning Brazilian artist Giselle Beiguelman, curated by Ilana Feldman with curatorial assistant Mariana Lorenzi, debuted in São Paulo in May 2022. The exhibition is the result of and response by the artist to receiving a gift of a Wandering Jew plant (*Tradescantia zebrina*) as a gift. Intrigued, not to say disturbed, by the name of this common houseplant, Beiguelman began to conduct in-depth research into the broader implications of botanical taxonomy used by European colonial powers to control narratives about Nature, to promote early modern capitalism, and to perpetuate prejudices and stereotypes about women and often-targeted minorities including Black, Indigenous, Jewish, Romani, and 2SLGBTQ+ people.

With its indoor and outdoor gardens, Artificial Intelligence-generated visual compositions and multiple videos, the exhibition is totally aligned with a principal vocation of both our institutions: to map, bring to light, and deconstruct prejudices, thereby contributing, we hope, to a more informed, more mutually respectful society.

Working with the Museu Judaico de São Paulo, Koffler Arts proposed to organise a special Canadian iteration of Botannica Tirannica that introduced Beiguelman to the work and expertise of two Indigenous knowledge keepers, botanist Dr. Jonathan Ferrier and gardener Isaac Crosby. (How fitting when Canada's national flag features a sugar maple or Acer saccharum leaf, a natural resource shared by the Indigenous peoples with early settlers who transformed it into a more than billion dollar a year industry.) This new, Toronto iteration of the exhibition - coordinated by Josh Heuman, Head of Artistic Engagement at Koffler Arts - also debuts a new series of prints by Beiguelman called, Poisonous, Noxious and Suspicious, dealing with the historical misrepresentation of fungi and garlic, both used extensively and "imaginatively" in Antisemitic propaganda.

From São Paulo to Toronto, and around the globe, we are living with the legacy of botanical colonialism. The only way to address this scientific aggression is to sow seeds of knowledge, provide light and sustenance and encourage deep roots of understanding that can change minds and, maybe someday, even change plant names.

Felipe Arruda Executive Director Museu Judaico de São Paulo

Matthew Jocelyn General Director Koffler Arts

From the Museu Judaico de São Paulo

Giselle Beiguelman is an artist who transforms complex academic research into sophisticated artistic works that communicate with multiple audiences. With original and provocative elaborations and solutions, she combines the consistency of critical and intellectual reflection with the creation of new aesthetic forms.

In Botannica Tirannica, a project that has accompanied her since 2021 and materialised into an exhibition in May 2022 at the Jewish Museum of São Paulo, curated by Ilana Feldman, Giselle employs botanical procedures to question how science is imbued with political, ideological, and often prejudiced meanings. This happens through classifications and nominations of nature that reproduce colonial hegemony. While taxonomy practices erase ancestral knowledge by claiming the novelty of its form of thinking, the chosen scientific and/or common name has the potential to perpetuate violence against Black people, Indigenous people, Jews, women, Roma, Sinti & Caló, and the 2SLGBTQ+ population.

To break the patterns of this colonial logic, the artist uses Artificial Intelligence, creating unlikely combinations. Her decolonial garden, with species bearing epithets that challenge any naming and classification standards, provokes deviations in the system that permeate science and common sense.

If the journey of *Botannica Tirannica* began in a newly inaugurated museum two years ago, now, like a plant that insists on growing, "Botannica" finds fertile ground to expand its reflections at the Koffler Arts in Toronto, having already passed through the 3rd Karachi Biennial in Pakistan (2022); the Sartorio Museum in Trieste, Italy (2023); the SESC Taubaté in the state of São Paulo (2023); and the Art Science and Technology Museum of Santa Maria in Rio Grande do Sul (2023). Wherever it goes, Giselle Beiguelman leaves with her "Botannica Tirannica" the possibility of inventing new worlds.

Mariana Lorenzi, Curator Museu Judaico de São Paulo



Introduction

After receiving a gift of a Tradescantia zebrina seedling, commonly called a "Wandering Jew", referencing the 13th-century myth that recurred in Nazi propaganda, Giselle Beiguelman was inspired to investigate the complex, interwoven histories of botany, taxonomy and colonialism that often result in discrimination and violence against specific groups of people: women, BIPOC, Jewish, Romani, 2SLGBTQ+, and seniors.

In addition to researching living plants, many varieties growing in the gallery and in front of the Youngplace building, the exhibition features two series of Al-generated digital prints and one series of videos by Beiguelman that are positioned as resistant and resilient life forms in a post-natural, decolonialized garden. A video essay details the artist's research process. São Paulo-based composer, visual artist, and researcher Gabriel Francisco Lemos created the soundscape using a method analogous to the one employed by Beiguelman to create the Al-generated digital images.

Koffler Arts is the exclusive North American host, and this iteration involves two significant changes. First, Beiguelman has worked closely with two Indigenous experts to situate the exhibition in a Canadian context: Dr. Jonathan Ferrier, a Mississauga, Anishinaabe (Ojibwe) scientist and a Biology professor at Dalhousie University, who served as Indigenous Botanical Content Lead, and Isaac Crosby, a Black/Ojibwa knowledge keeper, gardener and agriculture expert, who served as Head Gardener. Second, Koffler Arts debuts one of the Al-generated print series of mushrooms and garlic, deepening the understanding of Antisemitic references in folklore, at times with deadly results.

Josh Heuman
Exhibition Coordinator





Botannica Tirannica:

in search of a wandering ecosystem for a mutatis mutandis world¹

Giselle Beiguelman

The Garden Without Species

The world's most famous garden, the Garden of Eden, perhaps never existed. However, if it did, it certainly was not as in the traumatic story that marks Judeo-Christian cosmogony with the expulsion from paradise. Whether fact or fiction, what is important to remember is not the famous narrative of the forbidden fruit from the Tree of Knowledge that enchanted Eve, but that a strange tree occupied its centre—the Tree of Life—whose species is not specified in the Bible.²

Scientists, philosophers, and religious scholars have debated in their writings whether it was a ghaf (*Prosopis cineraria*) or a date palm (*Phoenix dactylifera*) and have taken inventory of how many species are cited in the Hebrew Bible and New Testament.³ This is a pretty difficult undertaking, given that according to traditional knowledge, a plant is not a thing in and of itself, and its names refer to its uses, groups, moments, and contexts. What prevails in the sacred scriptures, at least concerning plants, is the kaleidoscopic logic that French anthropologist Claude Lévi-Strauss identified among the Indigenous peoples, which presupposes models of provisional intelligibility.⁴

The two species that science identified as the ghaf and the date palm are pretty distinct, but have one thing in common: both survive in the most adverse conditions, such as lack of water and sandy soils. The ghaf has an impressive ability to remain green and leafy despite the inhospitable climate it inhabits. The best-known ghaf is over 400 years old. The tree, which is 9 metres tall, is

¹ This essay is a revised and updated version of the text written for the catalogue of the first exhibition held at the Jewish Museum of São Paulo in 2022.

² The Tree of Life (Etz Chaim) is also one of the main symbols of the Kabbalah. In this important framework of Jewish mysticism, however, it is not associated with the biblical narrative but rather with a diagram that contains the ten spiritual spheres through which God manifests himself.

³ Amots Dafni and Barbara Böck, "Medicinal Plants of the Bible-Revisited," Journal of Ethnobiology and Ethnomedicine 15, no. 1 (November 27, 2019): 57, https://doi.org/10.1186/s13002-019-0338-8.

⁴ Claude Lévi-Strauss, O Pensamento Selvagem, 9th. Ed. (Campinas: Papirus Editora, 1990).

planted in the Bahrain desert, where the mythical Eden is speculated to have been located, and receives tens of thousands of tourists annually.

In Jewish mythology, the date palm symbolizes beauty, prosperity, and regeneration, which turns bitter into sweet. This, say the Kabbalists, is inscribed in its original Hebrew name, formed by the words tam (complete, finalized) and mar (bitter). The interpretation also alludes to the resilience of Tamar, a biblical character who was widowed twice by the sons of the same man and, for this reason, was sent back to the house of her father. After being deceived by Judah, her father-in-law, who did not marry her to his third son when he came of age, she disguised herself as a prostitute, became pregnant, and married him, freeing herself of the stigma of being cursed—a blow to the chauvinists in the Book of Genesis.

In Muslim culture, the date palm symbolizes prosperity and hospitality, and has religious connotations in addition to medicinal uses. The Ramadan fast is broken with three tamars (dates), and the fruit is mentioned 23 times in the Koran. It is customary in some countries to eat dates before breakfast; some say that one date provides enough energy for a Bedouin to walk for three days.

The date comes from a palm tree that can take up to 80 years before it bears fruit. A well-known Arab proverb says: "The one who plants date palms will not harvest dates." The ancient proverb describes a generous ecological act, conscious that this planting and cultivation does not affect the present but rather the future of those who follow us. Interestingly, similar reasoning is present in the Jewish law that says one "Shall not destroy," which prohibits cutting down fruit trees.

There is debate about whether the word *tamar* comes from Hebrew or Arabic. Both languages have the same name with few differences in pronunciation, and both can be translated as palm trees. Their meanings, however, transcend their direct relation to the plant. As a result of the Muslim colonization of the Iberian Peninsula, the fruit's name in Portuguese and Spanish is "tâmara." In that case, it is not calling the fruit a date, a derivation of its scientific name (*Phoenix dactylifera*, meaning Phoenician finger), as in English and French. The analogy between plants and humans is one of the colonial anachronisms that anthropomorphize the plant world via taxonomy, making plants a reflection of man.

Laboratory of Prejudices

Throughout the 18th century, botany became institutionalized as a technology of power that used taxonomy as its instrumental knowledge. Dissected, compartmentalized, and lined up in a row in European botanical gardens, the world of plants was converted by colonial empires into a seemingly neutral space, while in fact, patriarchal, racial, and religious prejudices were projected inside it.

What follows the cataloguing of the world is the collection of species that will feed the plantations. It was no coincidence that the Boundary Demarcation Commission, which defined the borders between the domains of Spain and Portugal in 1751, was accompanied by the Orinoco Expedition. This scientific expedition was led by the Swede Pehr Löfling (1729-1756), the beloved disciple of the father of taxonomy Carl Linnaeus (1707-1778), to whom he dedicated his work on Hispanic America. In recognition of his deeds, Linneaus named a botanical genus after him: Loeflingia.

This was not uncommon but rather a dynamic of the colonial extractivist past. Colonialism expropriated not only land but also plants from their relationship to the environment and the society to which they belonged. Their environment and their medicinal and religious uses are submitted to a symbolic ritual of erasure through the introduction of new scientific names given to things. In the scope of this logic, the notion of "Plantationocene" advocated by Donna Haraway to account for a series of material and symbolic operations underlying colonialism that persist to this day gains strength.⁵

The word "botany" appeared for the first time in 1682, in the work of the English naturalist John Ray (*Methodus plantarum nova*). He tested a classification method for plants based on habitat, their uses, and the similarities between their primary parts (leaves, stems, roots, etc.). This method undermined the vast herbalist tradition and its religious motivations for recreating the Garden of Eden, which marked the medicinal gardens that peaked in popularity during the Renaissance. However, this method breathed new life into aspirations of formulating a universal understanding of nature, commonplace a century later in

⁵ Donna Haraway, "Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin," Environmental Humanities 6, no. 1 (May 1, 2015): 159–65, https://doi.org/10.1215/22011919-3615934.

⁶ Jason T. W. Irving, "Botanical Gardens Colonial Histories and Bioprospecting - Naming and Classifying the Plants of the World," in Theatrum Botanicum, ed. Uriel Orlow and Shela Sheikh (Sternberg Press, 2018), 73–80.

modern science. A classification system of this scope required a uniform system of nomenclature, as the one created by the Swedish botanist Linnaeus in his work *Species Plantarum* in 1753.

If the classification system created by Ray marked a separation between botany and medicine, the system created by Linnaeus cast plants out from the totality of life. In the binomial system created by Linnaeus, plants receive a first and a last name in the language of the European cultural elites, Latin. The plant world incorporates the identities of kings, noblemen, popes, and renowned scientists, accompanied by pompous words that allude to the geometry of the shapes of their leaves, trunks, and roots, referring to human characteristics such as ears and vaginas. Throughout the colonization of the Americas and the African continent, progressive evolution and natural selection principles contaminated everything from the economy to the imagination. This prejudice gained laboratory ballast and rooted itself in the collective imagination.

Nomenclature is a Ritual of Erasure and Oppression

Naming something scientifically is to take possession of it, denying the material and symbolic possession of nature to original peoples. In the scientific organization of the world, for example, the *Jatobá* (West Indian locust) is no longer the tree of hard fruits, sacred to original peoples for its healing powers, but rather a *Hymenaea courbaril*, in the taxonomy of Linnaeus, referring to the female hymen due to the rigidity of the peel of its fruits.

Hymenaea is rooted in the Greek god of marriage, Hymenaios. Represented by a youth who carries a torch and a veil, he is the one who unites and binds the two parts. Although no direct reference is made to the vaginal membrane which tears during sexual intercourse, the term assumes this connotation in the medical literature of the 16th century, directly associating virginity, marriage, and the supposed functions of women in society (procreating and serving, primarily).

There are many plants with names that cast women in a chauvinist approach, such as Shameless Mary (*Impatiens walleriana*), Hooker's lips (*Psychotria elata*),

⁷ To ensure greater fluency in reading, this text only cites the common prejudiced names of plants. We emphasize that these names are offensive to various social groups and individuals and do not reflect our worldview.

and Nipplefruit (Solanum mammosum). Nevertheless, this also occurs in the scientific nomenclature, in which many plants with scientific names allude to Greek nymphs—beautiful demi-goddesses who never grow old and favour men and nature—who gave their name to the genus of Nymphaeae (water lilies), which enchanted the French impressionist painter Claude Monet.

More common are flowers, generally white ones, which are named virginiana, virginica, or virginicum, among others, making direct reference to female virginity and its association with purity and delicateness.⁸ Places uninhabited by Europeans, which appeared in various old maps as terra incognita, are commonly known as "virgin land," a world to be subjugated and opened up to devastation. There is no denying it: colonialism does rhyme perfectly with patriarchalism.

Black people are the target of different types of prejudice, expressed in common names, but also in scientific names. The names of plants that contain *kaffir* (or *caffrum*) are highly offensive. A term derived from Arabic for "non-believer", *kaffir* became, among the European colonizers, a generic synonym for "negro". For these reasons, in the countries of sub-Saharan Africa today, *kaffir* is considered an equivalent to the repudiated "N-word" due to the racial violence it embodies.

Other derogatory names contain the word "Hottentot". By the end of the eighteenth century, this was how the Dutch referred to all the non-Bantu people of southern Africa. The word was synonymous with cannibal, savage, and alluded to some physical stereotypes, such as protruding lips and buttocks, as is evident in the degrading iconography associated with the so-called "Hottentot Venus" who was taken to Europe where she was humiliated in supposedly "scientific expositions" for the entertainment of white elites. This story was the main theme of the award-winning film Vénus Noire (2010) by Abdellatif Kechiche.

Prejudiced names are also revealed in the projections of white European culture on the shapes of plants, conjugated into terms considered offensive to original peoples, who are described as "Indians". This is how Christopher Columbus, who believed he had landed in the so-called "East Indies", called the native

⁸ These terms are all references to the US state of Virginia or, more broadly, a historic definition covering the entire eastern USA and southeastern Canada. This, in turn, is a likely reference to Queen Elizabeth I, known as the "Virgin Queen". (Another possible, though less likely reference is to Wingina, the first Native American leader to be encountered by English colonists in North America, and Wingandacoa, the territory he led.)

inhabitants of the Americas "Indios" (English: Indians). Hundreds of plants in the English language are known as "Indian", such as *Indian moccasin* and *Indian hemp*. Another manifestation of systemic violence against Indigenous people is evident in the biased naming of certain plants, including those with ceremonial and healing significance, which underwent cultural erasure through Western nomenclature, being appropriated as a national symbol, as is the case of the maple leaf on the flag of Canada. Despite this tree having a variety of medicinal and ritual uses by the First Nations, colonialism erased its ancestral meanings by turning it into a national symbol of the conquering peoples.

Invasive plants are often called "Gypsy weeds". The adjective is problematic not only because it generalizes people with different histories, but especially because it appears in dictionaries as synonymous with a variety of offensive meanings including practitioner of an unlicensed business, and thief. In a phrase: "one who cheats". The word "gypsy" is an exonym, a label imposed by outsiders on the Romani people comprised of five large groups - Roma, Sinti, and Kale (or Cale), Manouches, and Romanichals (or Romaniche) - each of which includes a number of subgroups. As the Romani people migrated westward from India towards Europe, their features and dark skin led them to be mistaken for Egyptians. As explained by Ian Hancock, a scholar and linguist who specialized in the Romani people, this mistaken origin is evident in English and other languages.9 Victor Hugo, in his monumental novel The Hunchback of Notre Dame (1831), observed that the Roma were referred to as "egyptiens" in Medieval French. Similarly, the term for gypsy is "gitano" in Spanish, derived from "egipcio" meaning Egyptian. In Romanian, it is "tigan", in Bulgarian, "циганин," and in Turkish, "cingene" — all stemming from slang terms for "Egyptian" in those languages.

In the case of the Jews, Antisemitism focuses on physical traits, such as stereotypically large ears, and cultural traits, such as the beards of Orthodox men. It also conforms to ancient myths, such as the indictment of Jews as the deicidal people, which appears in the iconography of the crown of thorns worn by Jesus Christ, present in various plants. Some examples are Auricula judae (Jew's ear or Judas's ear, a species of fungus), Saxifraga stolonifera (Jew's

⁹ Janaki Challa, "Why Being 'Gypped' Hurts The Roma More Than It Hurts You," NPR, December 30, 2013, sec. Code Switch: Word Watch, https://www.npr.org/sections/codeswitch/2013/12/30/242429836/why-being-gypped-hurts-the-roma-more-than-it-hurts-you.

beard, a species of begonia), and *Euphorbia milii* (Christ's thorn) which also has a misogynist name in Portuguese, Bride's mattress.

As occurred with plants assigned names associated with Indigenous ceremonies and medicinal uses, various plants present in Jewish rituals and herbalism were classified as "Jewish." For example, *Citrus medica* is the citron (Jew's apple), called etrog in Hebrew, that is integral to the Jewish festival of Sukkot (Feast of Booths), which involves four plants in its rituals: *Iulav*, a date frond; *hadass*, the branch of a myrtle tree; *aravah*, the branch of a willow tree; and etrog, the most sacred, since it is heralded for its taste and fragrance.¹⁰

Other "Jewish" plants are the *Corchorus olitorius* (Jew's mallow) and eggplant (Jew's apple), two plants common in Middle Eastern cuisine. Another plant, *Physalis*, is called Jew's berry in English and *Judenkirsche* (Jewish cherry) in German. Despite the apparent innocuous association, the name is Antisemitic, as the small fruit is wrapped in a leaf that alludes to the infamous hat called *Judenhut* in German (French: *Coiffe juive*; Latin: *Pilleus cornutus*) that Jews were forced to wear in mediaeval Europe following the Fourth Council of the Lateran (1215), so they could be easily distinguished from Christians.¹¹

We must not overlook *Der Giftpilz* (The Poisonous Mushroom, 1938), an illustrated children's book that was central to Nazi pedagogy. Divided into 17 chapters, the book taught, through captioned caricatures and drawings, that one cannot trust Jews:

"Just as it is often hard to tell a toadstool from an edible mushroom, so too it is often tough to recognize the Jew as a swindler and criminal... They disguise themselves, try to be friendly, stating their good intentions to us a thousand times. But you should not believe them. Jews they are and Jews they will always be. For our people, they are poisonous." ¹²

¹⁰ Sukkot is a week-long Jewish holiday each fall when a Sukkah (three-sided booth topped with palm fronds, bamboo, or pine boughs) is erected to commemorate the 40 years of wandering in the Sinai desert after the enslaved Jews left Egypt. Observant Jews eat, socialize, and sometimes even sleep in the Sukkah. Known as the "festival of the harvests," it is the most plant-based Jewish holiday, and is considered one of the three pilgrimage festivals during which Israelites, for more than a thousand years, went to the Temple in Jerusalem.

¹¹ Sabine Aboling, "The Attribute »Jude« in Historic Vernacular Plant Names in Germany," Aschkenas 16, no. 2 (March 1, 2008): 583–623, https://doi.org/10.1515/ASCH.2008.583. All references to Antisemitic names of plants in German are based on the Aboling study.

¹² Ernst Hiemer, Der Giftpilz (Nuremberg: Stürmerverlag, 1938), https://www.jewishvirtuallibrary.org/der-giftpilz.

This vision of the Jew as untrustworthy, who pretends to be something he is not, is repeated in other common names of plants that are assigned the word (Jew in German). Among the mushrooms alone, there are six species called Judenpilz (Jewish mushrooms), so named either because they are poisonous or considered inferior. Similarly, Aesculus hippocastaneum, called Judenkest in German (English: Jewish chestnut) is considered inferior, so is fed only to animals.

Several other plants have names with no ethnobotanical basis that justifies an association with Jews. Butomus umbellatus, a species of flowering rush, whose rhizomatic roots are edible, is called in German Juudenspeck (Jewish bacon), Judenfleisch (Jewish meat), and Judenschinken (Jewish ham). And Capsella bursa-pastoris, an herb with edible pods, is called in German Juudenspeck (Jewish bacon). What prevails here is the supposed inferiority of Jews expressed in the perceived inferiority of these vegetables.

It is not surprising that some "Jewish" plants have other common names in German that characterize them as animal-like, savage, or "Gypsy"-like. This is the case of the Allium ursinum (Wild garlic) which is also known as Judenzwifel (Jewish garlic) Bärenlauch (Bear leek), and Zigeunerknoblauch (Gypsy leek). Throughout German history, Jews and "Gypsies" (Romani people) also share an association with filth, evident in the names of plants such as Arctium lappa and the Bidens tripartita, known as Juddeleis (Jewish lice) and Zigunelai (Gypsy lice). The inflorescence of both plants – comprising the complete flower head (stems, stalks, bracts, and flowers – resemble the long beards associated stereotypically with men in these two cultural groups.

The movement for taxonomic renaming has mobilized several scientists, though more progress has yet to be made. In 2006, Sweden decreed the renaming of the *Judenkirsche* and other plants with Antisemitic connotations, which was not well-received by some discussion forums on the Internet. One person reacted:

I like Physalis alkengi, Juutalaiskirsikka in Finnish and Judenkirsche in German, in other words, "Jew's cherry", since as soon as they escape my garden, I can say: Wir müssen die Judenkirschen ausrotten! (We must eradicate the Jew cherries!).¹³

¹³ Sputnik International, "Swedish Plants Purged of 'Anti-Semitism', Become Politically Correct," Sputnik International, September 15, 2017, https://sputniknews.com/20170915/sweden-anti-semitic-plans-1057426161.html.

Explicitly, as in the commentary above, or naturalized by daily use, Antisemitic terminology shows its cultural force and ability to spread. Something evident in the linking of the Jew with betrayal and deicide, clear in the common ritual of the burning of the Judases (papier-mâché effigies of Judas Iscariot) on Holy Saturday, the day before Easter, which also lends its name to Cercis canadensis, commonly called Judas tree in English, and Judasbaum in German.¹⁴

Nothing, however, approaches the scope of dissemination and virulence of the maligned legend of the Wandering Jew, which dominates the plant family *Tradescantia* in various languages. The legend of the Wandering Jew has circulated in Europe since the 13th century. It tells the story of a man named Ahasuerus who was one of the loudest to cry out "Crucify him," referring to Jesus, and harshly bade Jesus to move on as he walked to his crucifixion. In response, Jesus cursed him to "move on until the last day." ¹⁵ Although Catholic church scholars maintain that this man was Cartaphilus, one of Pontius Pilate's Roman palace guards, the legend of the Wandering Jew endures as part of the oral tradition of Good Friday. While the myth originated in 13th century England, it was revived in Germany in 1602, and later popularized by Eugène Sue's 1844 novel, *Le Juif errant*, and Gustave Doré's 1856 etchings.¹⁶

The legend of the Wandering Jew was also used in works of art against Antisemitism, as in the film *The Wandering Jew* (1933) by British film director Maurice Elvey, starring German-British actor Conrad Veidt (famous for his role as the sleepwalking assassin in *The Cabinet of Dr. Caligari* of 1920), and in paintings by Jewish Belarusian-French artist Marc Chagall (1887-1985). Undoubtedly, the version that prevails today is the Nazi-era propaganda film, *Der Ewige Jude* (*The Eternal Jew*, 1940). Promoted as a documentary about world Jewry, the film combined real footage from Polish ghettos, documentary images of affluent Jewish families, like the Rothschilds and the Warburgs, with fictional films to cast Jews with low social standing who insinuate themselves into different countries to exploit the world parasitically.

¹⁴ A related tree, Cersis siliquastrum, is called Arbre de Judée in French.

¹⁵ For more, see James Strong and John McClintock, The Cyclopedia of Biblical, Theological, and Ecclesiastical Literature.; Harper and Brothers; NY; 1880. Retrieved at https://www.biblicalcyclopedia.com/J/jew-the-wandering.html

¹⁶ For additional context, the legend was first published by Roger of Wendover in Flores historiarum (1228), about an archbishop from Greater Armenia visiting England (in 1228) reported that there was in Armenia a man formerly called Cartaphilus who claimed he had been Pontius Pilate's doorkeeper and had struck Jesus on his way to Calvary, urging him to go faster. Jesus replied, "I go, and you will wait till I return." Cartaphilus was later baptized Joseph and lived piously among Christian clergy, hoping in the end to be saved. Retrieved at https://www.britannica.com/topic/wandering-Jew#ref101112

"Humanity is a Garden..."

The basis of the Nazi extermination policy was eugenics, a type of "scientific racism" whose origins lie with Linnaeus who, in addition to establishing the binomial taxonomy of botany also made a classification of five different "human varieties":

Europeanus (whites): light, wise, inventors Asiaticus (yellows): stern, haughty, greedy

Americanus (reds): unyielding, cheerful, and free behaviour

Africanus (blacks): sly, sluggish, neglectful ¹⁷

This model gradually became more sophisticated in the following decades, marked by the study of different craniums by Johann Friedrich Blumenbach, the father of racial classification, and Charles Darwin's principle of natural selection, which particularly impacted his cousin, Francis Galton pioneer of "eugenics" (literally "good creation") which he named.

The publication of writings by French writer Arthur de Gobineau (1835) and American physician Samuel Morton (1839) established both as pillars of "scientific racism" which fed Nazi Aryanism, and their worldviews are still present in white supremacist discourse today. In this context, the enslavement of Black and Indigenous people gained scientific legitimacy and the racialization of Jews first occurred. Additionally, anthropological photography emerged as a technology of power and methodology of racialist studies.¹⁸ Like plants and animals, human bodies are objectified, dissected, and often instrumentalized as entertainment for the masses. It is impossible to forget the Botocudo Indigenous people who were taken from their native land in Espírito Santo state in Brazil to be presented at the 1882 Brazilian Anthropological Exhibition organized by the National Museum of Rio de Janeiro—where representatives of other Indigenous cultures were also exhibited—and from there on to Europe. 19 The case of the "Botocudos of Brazil" was not exceptional. In Europe, the exhibition of Indigenous and Black people from afar was held in zoos, animated "scientific" meetings, and spectacles of "entertainment."

¹⁷ Carolus Linnaeus, Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus differentiis, synonymis, locis, vol. 1, 1758, http://www.biodiversitylibrary.org/item/10277.

¹⁸ Maria Helena Pereira Toledo Machado and Sasha Huber, eds., (T)races of Louis Agassiz: photography, body and science, yesterday and today (Rio de Janeiro: Capacete Entretenimentos, 2010).

¹⁹ Jens Andermann, "Espetáculos da diferença: a Exposição Antropológica Brasileira de 1882," *Topoi (Rio de Janeiro)* 5 (December 2004): 128–70, https://doi.org/10.1590/2237-101X005009006.

Moreover, it is within the scope of colonialism that eugenics emerges. Francis Galton coined the term eugenics in 1883 in the book *Inquiries into Human Faculty and Its Development*.²⁰ His motivation was to offset the "slowness" of the processes of natural selection that Darwin theorized would exterminate the "savage races".²¹ Nevertheless, this would take centuries. Galton dedicated himself to creating mechanisms to "improve" the human species, changing the composition of populations, and favouring selective breeding based on preferred types to the detriment of unfavourable types.

Proposed as a science, eugenics soon became a social movement. In the United States, its popularity started in 1907 with the approval of laws on sterilization and the prohibition of interracial marriages. In Canada, eugenics policies endured from the 1920s to the 1970s. Brazil was also on the "vanguard" in this field, with a Eugenics Society dating back to the first decades of the 20th century. Headed by physician Renato Kehl, its members included prominent modernist artists like the poet Jorge de Lima, intellectuals like the educator Fernando de Azevedo, and other loyal followers like the influential Brazilian children's book author Monteiro Lobato.²²

In Nazi Germany, eugenics became the official policy of the state starting in 1933. The results of this delirium reflected in the terrifying number of deaths: 6 million Jews, 250,000 Sinti, an unknown number of Black people (but certainly in the hundreds of thousands), at least 200,000 mentally ill people, and many thousands of homosexuals, communists, and political opponents who were classified as antisocial.²³

For the eugenicists, humanity was a garden that, to flourish, must rid itself of weeds. These ideas can be read in an edition of writings organized by Galton's most important disciple, Karl Pearson.²⁴ "Weed," however, does not refer to any plant of any species, genus, or category recognized by current scientific

²⁰ Francis Galton, Inquiries into Human Faculty and Its Developments (London: galton.org, 2001).

²¹ Charles Darwin, The Descent of Man, and Selection in Relation to Sex., vol. 1, p. 201 (Londres: John Murray, 1871), http://darwin-online.org.uk/content/frameset?itemID=F937.1&viewtype=side&pageseq=214.

²² Lilian de Lucca Torres, "Reflexões sobre raça e eugenia no Brasil a partir do documentário 'Homo sapiens 1900' de Peter Cohen," Ponto Urbe. Revista do núcleo de antropologia urbana da USP, no. 2 (February 1, 2008), https://doi.org/10.4000/pontourbe.1914.

²³ Bernardo Beiguelman, "Genética, Ética e Estado: (Genetics, Ethics and State)," Brazilian Journal of Genetics 20 (September 1997): 525–30, http://www.scielo.br/j/bjg/a/TBdvhSchFY749gWxBVvQxSM/?lang=pt.

²⁴ Karl Pearson, The Life, Letters and Labours of Francis Galton, vol. 3 (Cambridge [Eng.]: University press, 1914), https://www.biodiversitylibrary.org/item/72156.

taxonomy. "Weed" is a name for any plant that grows where humans do not want it. Its classification as *mala hierba* (Spanish for "bad herbs") is another vestige of colonialism. Weeds are plants that do not serve the extractivist economy, that survive in adverse conditions, that cannot be easily exterminated, and that cannot be controlled by radical eugenics.²⁵

Taxonomy is a Technology of Power

The relationship between colonialism and appropriation is endemic. The domination of nature and the subjugation of non-male, non-white bodies are strategic to its success, and science played a decisive role for its success. As before, the extended colonial enterprise called on scientists to make maritime expansion possible and legitimize the annexation and control of territories. This belief in science compensates for humanity's insignificance compared to nature's strength, and subjugates its diversity. The ritual of erasure by scientific nomenclature neutralizes forms of ancestral knowledge. Anthropological and ethno-botanical studies have shown that the practice leads, on one hand, to the contraction of the imagination and, on the other hand, to a substantial loss of knowledge in wide-ranging disciplines from medicine to chemistry.

"[Modern] Science and empire are cause and effect of one another," wrote Antonio Lafuente and Nuria Valverde. The colonial empires demanded that scientists and their patrons share the belief that things of nature can be captured in words and diagrams. Additionally, travelling naturalists believed that natural processes could be drawn, recorded in scientific articles, and catalogued.²⁶

As a general science of order, taxonomy is a formula for tabulating the world, used to organize based on similarities and differences.²⁷ From the Royal Botanical Gardens, Kew to the American database JSTOR, which connects herbariums worldwide on the Internet, the prevailing logic is coordinated information centralization, geopolitical preeminence, and normalizing power.

²⁵ Alfred W. Crosby, *Imperialismo ecológico*, trans. José Augusto Ribeiro and Carlos Afonso Malferrari, São Paulo: Companhia das Letras. 2011.

²⁶ Antonio Lafuente and Nuria Valverde, "'Linnaean Botany and Spanish Imperial Biopolitics," in Colonial Botany: Science, Commerce, and Politics in the Early Modern World, ed. Londa Schiebinger and Claudia Swan (Pennsylvania: University of Pennsylvania Press, 2007), 246–70.

²⁷ Michel Foucault, As Palavras e as Coisas: Uma Arqueologia das Ciências Humanas, trans. Salma Tannus Muchail, 6ª ed. (São Paulo: Martins Fontes, 1992).

Studies on Afro-diasporic and Indigenous ethnobotany show that the subjugated people, despite their extreme oppression, have constantly subverted the order of nature fabricated by colonialism. Resistance is evident from the enslaved who concealed grains of rice in their hair to ensure continuity of their food customs with their children, to their insistence on Indigenous names for flora. More than just a history, it is the formulation of another ecology.

As these studies reveal, if it is true that colonial empires expropriated and normalized flora everywhere they moored their ships, it is also true that this domination was corrupted by cultural infiltration whereby the subjugated cultures that were displaced, notably enslaved Africans brought to Brazil, stamped their semblance and tastes on the new landscape. *Dendê* (an African palm oil) and *quiabo* (okra) are not just words of African origin, but transplanted traditions that inhabit Yoruba rituals and Brazilian cuisine. Here, we must call attention to the permanence of Indigenous names in popular terminology in Brazil, like the internationally known jacarandá wood, as well as babassu palms and ipês. They are evidence of the resilience of Amerindian cultures, persisting in the common naming of 80% of Brazilian flora and fauna²⁹ which attest to the strength of the Indigenous peoples resistance to the memoricide of their cultures.

Memoricide is a neologism coined in a 1991 essay by the Paris-based Croatian physician, Mirko Grmek. It defines "the deliberate intention to destroy all traces of the cultural and historical existence of a nation in a particular territory." This memoricide in Brazil began with the Portuguese renaming a tree. The tree called *Ibirapitanga* (red tree) by the Amerindians was called *Pau-Brasil* (Brazilwood) by the Portuguese, who adopted this as the country's name. Wood from this tree was the first product commercialized by the Portuguese in the 16th century. Equally important in this discussion is the process of the renaming of Pau-Brasil in 2016 by scientists — based on genetic sequencing that demonstrated it constituted its own genus in taxonomy, *Paubrasilia* — who opted for the Latinization of its name in Portuguese, to the detriment of its Tupi-Guarani name (Ibirapitanga) which would have been a commendable step toward reparation.

²⁸ Judith Carney, "Seeds of Memory: Botanical Legacies of the African Diaspora," in African Ethnobotany in the Americas, ed. Robert Voeks and John Rashford (New York, NY: Springer, 2013), 13–33, https://doi.org/10.1007/978-1-4614-0836-9 2.

²⁹ Adriana Frazin, "Palavras indígenas nomeiam a maior parte das plantas e animais do Brasil," EBC, October 29, 2015, https://memoria.ebc.com.br/infantil/voce-sabia/2015/10/palavras-indigenas-nomeiam-maior-parte-das-plantas-e-animais-do-brasil.

³⁰ Fatovic-Ferencicand, S., and T. Buklijas. "Mirko Drazen Grmek: The Genesis of Scientific Fact and Archaeology of Disease." Journal of the Croatian Anthropological Society 24, no. 1 (June 2000): 1-10.

There is an underlying debate to these naming processes which has appeared with some frequency in scientific literature. Some biologists have suggested a reassessment of the established practice that highlights the names of the first authors of scientific publications rather than the pre-existing Indigenous names. This would enable the evaluation of other forms of knowledge and confront strategies that deny the right to the memory of Indigenous cultures.³¹

There is nothing "natural" about the binomial taxonomical system by Linnaeus, which follows two basic guidelines. First, a hierarchy, which submits plants to a kingdom (in this case, the plant kingdom) and divides them into phyla, classes, orders, families, genera, and species. Second, an organization that places plants in these categories according to their reproductive characteristics (the number of stamens and pistils). Sexist and binary, the taxonomy by Linnaeus assigns superiority to the presence of supposedly male organs (stamens) over plants in which supposedly female organs (pistils) are dominant. This leads us to believe that masculine authority must be an atavistic gift of nature while reinforcing societal prejudices of the time, which are still embedded in society today.

An essential tactic of the erasure of cultural plurality is the misogyny that dominates botanical classifications formulated mainly by white men. This perspective also contributed to corroborating the binary perspective that underpins patriarchal culture, in which a woman is inferior and gender diversity is restricted to the binary of males and females. Paradoxically, however, the plants considered most complex in the theory of evolution, the angiosperms, are mostly monoecious. These plants produce flowers and fruits, and despite their name being linked to the male gender (angio, from the Greek for "vessel" + sperma, "seed"), they have the male and female reproductive organs (androecium and gynoecium).

An entire line of feminist investigation and queer studies is devoted to calling attention to the forms of concealment of these dynamics throughout history.³² At the same time, these works divest the prejudiced associations between 2SLGBTQ+ people and floral symbolism, giving them new connotations and

³¹ Len Norman Gillman and Shane Donald Wright, "Restoring Indigenous Names in Taxonomy | Communications Biology," Communications Biology 3, no. 1 (October 23, 2020): 609, https://doi.org/10.1038/s42003-020-01344-y.

³² Patricia Fara, Sex, Botany, and Empire: The Story of Carl Linnaeus and Joseph Banks, (New York: Columbia University Press, 2004).

positiveness. Among these terms are Pansy (*Viola tricolor*), because of the "pansy craze" that described shows that dominated the entertainment circuit in 1930s New York, marking the move of gay culture from underground to the mainstream. The violet (*Saintpaulia ionantha*), known as the Sapphic flower because of its association with Sappho who, in the late 7th and early 6th centuries BCE, lived on the island of Lesbos and wrote erotic poetry about women. Additionally, the green carnation (*Dianthus caryophyllus*), popularised by the Irish writer Oscar Wilde. And lavender (*Lavandula angustifolia*), which became associated during the early twentieth century with gay men, became the basis of the Lavender Scare during the 1950s in the United States, targeting homosexuals in civil service leading to the dismissal of over 5,000 people, then, in 1969, was transformed into a symbol of empowerment, as crowds in New York City carried lavender branches and wore lavender-coloured armbands and sashes in one of the most important marches to affirm the rights of homosexuals.

Paralleling this strategy of transforming derision and offence into a symbol of liberation, I accepted the assignation of "wandering" to Jews as a sign of force and resilience. In line with some presumptions of contemporary philosophy, I used wandering as a derivation of a nomad which, for Gilles Deleuze and Félix Guattari, is the social condition that performs the capacity for change, the deterritorialized body that escapes from the processes of domination.³³

Every Weed Is a Rebellious Being

For about three years, I have been researching plants with racist (demeaning to Black, Indigenous, and Romani people), misogynistic, and Antisemitic names. I collect everything, scientific and common names. There are thousands of species. One can say that all colonial nomenclature is offensive due to the erasure of the cultures of Indigenous people. All colonial nomenclature is offensive because it privileges the colonisers, backed by the supposedly divine authority of European kings and queens.

In early 2021, at the invitation of Central Galeria (São Paulo), I was writing a review about a brilliant site-specific installation by Brazilian artist C. L. Salvaro,

³³ Gilles Deleuze and Félix Guattari, Mil Platôs - Capitalismo e esquizofrenia, trans. Peter Pál Pelbart and Janice Caiafa, vol. 5 (São Paulo: Editora 34, 2005).

who filled an abandoned house with climbing plants.³⁴ I was presented with a "Wandering Jew" plant and, at that moment, I was chilled. This name is a traumatic trigger for any Jew due to the Antisemitic power it possesses. Astonished, I remember arriving home and searching for "Wandering Jew" online. I could not believe that a plant could have this name. But it was true. A Google search returned results with books and ads in various languages on the wandering Jew plant that I liked so much, in addition to associating the term with historical figures persecuted by different circumstances, including former Brazilian President Dilma Rousseff at the time of the proceedings that culminated in her impeachment.

Disconcerted, I began to research the relationships between botanical taxonomy and prejudice. To my great surprise, I discovered that many of these plants, which have pejorative and derogatory names, are considered weeds. This demeaning term, weed, in hegemonic thinking became a symbol of resistance for me. As in the sambas of Brazilian singer and songwriter Zé Kéti, immortalized by the voice of Brazilian singer Elza Soares, they seemed to be saying: "They can arrest me, they can beat me, they can even starve me ... If there is no water, I dig a well." ³⁵

Weeds are just like this. They climb rocks. They fit in between trees. They reemerge. They resist. Like the enslaved, who trafficked the Imperial palms—a symbol of power for the monarchy and of Brazilian plantation wealth—by swallowing the seeds and storing them in their feces as contraband. Like the Jews, who have endured every cycle of persecution, from the Roman and Christian Crusades to the Inquisitions and Nazism, and managed to stay alive. Like Indigenous peoples of the Americas and their ancestral knowledge, having endured more than five centuries as the victims of policies of erasure and genocide. Like the Romani, known as "Gypsies" despite all of the dictionaries that associate them with deception and jest. Like women, erased from all the histories and violated in every sense.

Undesirable, indomitable, cursed weeds are the perfect metaphor for the fight for the right to life. Rebels, they challenge a world dominated by a natural order

³⁴ Beiguelman, G. C. L. Salvaro: Antes de afundar, flutua. Artishock Revista, 26 mar. 2021. Available at: https://artishockrevista.com/2021/03/26/c-l-salvaro-antes-de-afundar-flutua/.

³⁵ This is an English translation from the Brazilian Portuguese lyrics in Zé Kéti's 1964 song "Opinião".

that does not exist, as dreamed of by the eugenic movement. Despite the abominable results during World War II, eugenic societies endured until the mid-1960s, leaving profound marks on contemporary culture, such as beauty contests and cutest baby awards. Its marks are also present in cutting-edge knowledge, from Artificial Intelligence (AI) to gene editing, where the keyword of eugenics - standardization - is updated.

The process of generative imaging, created with Al, is shockingly similar to that which Francis Galton used in his study of eugenics, for which he created a photographic method: composite portraiture. In this process, Galton superimposed different photos and erased their differences to identify, for example, the "generic criminal" or the "generic Jew." In 1879, Galton wrote that the composite portrait "represents no man in particular but portrays an imaginary figure possessing the average features of any given group of men." This is basically what a Generative Neural Network does, and it is at the core of the popular deepfakes: recognize patterns detrimental to particularities. But what about that which falls outside the pattern? What place will they occupy in society?

Learning From the Machine

We know that vision is a biological attribute, but seeing is a cultural construction. Western culture's difficulty understanding the world outside the parameters of Renaissance frames and windows is undeniable. Paintings and books prove it. Based on this reasoning, I ask: Will there come a time when the computer vision becomes so hegemonic that we can no longer see that which falls outside of the pattern, in the same way, that Western culture finds it difficult to understand what falls outside the rectangular canon or the frame of a painting or page? Are we on the cusp of an era of machine eugenics?

One more example may help to clarify this assumption. The selfie standard cannot be dissociated from the algorithmic rules of conditional visibility in social media and project it to the social realm. The liberal economy of "Likes," and its successful formulas, tends to homogenize everything we produce and see. It standardizes angles, frames, scenes, and styles. What is behind this are the criteria for organizing the data so that it is more quickly "findable" in online searches and how the algorithms contextualize the contents in the specific

bubbles to which we belong (something that we do not control but that controls us). In this sense, paraphrasing French philosopher Michel Foucault's *Discipline and Punish* (1975), algorithms are the disciplinary apparatus of our time, each of which gaining efficiency as people try to respond to its rules to become visible. From this perspective, it is possible to understand how the platformed Al society operates as a social Darwinist device of exclusion that may be pointing to new forms of eugenics: machinic eugenics of the gaze.

It was at this point that I decided to combine my studies on racism and botany with my artistic experiments using AI.

In practice, this involved challenging the principle of a well-done machine training, which, to produce a consistent model, requires a highly coherent dataset to synthesize images that appear more real than reality itself, like those available on the well-known site *This Person Does Not Exist.*³⁶ That was done by feeding the system with incongruent data, like plants of different species without visual similarities, but always with names demeaning to Jews, Black people, women, Indigenous peoples, and people known as "Gypsies," forcing the system to operate its synthesis and, in this way, generate an image that has no intention of tracing the real, but instead operating beyond the traditional concept of nature (as a counterpoint to culture).

Understanding the nuances of the system allowed me to learn from the machines, that is, to educate myself for another type of facilitation. I believe I finally understood what Donna Haraway³⁷ meant with A Cyborg Manifesto (1985): we must look for ways of breaching the frontiers between nature and culture. This finding was fundamental for creating the series Flora Mutandis, in which I worked with my criteria to catalogue plants, dividing them into groups of species that reference, for example, parts of the body that allude to shoes, that have become, due to their beauty and strangeness, my favourites, among other highly personal classifications.

Any similarity with the famous passage by Michel Foucault—reading a transcription that Jorge Luis Borges had done of a Chinese encyclopedia which lines up fantastic beasts, dogs that looked like flies, and others that do

³⁶ https://thispersondoesnotexist.com/

³⁷ Donna J. Haraway, Simians, Cyborgs, and Women: The Reinvention of Nature, (New York: Routledge, 1991).

not exist—is no coincidence. This was one of the starting points for developing an artistic methodology designed to understand the scientific genealogy of prejudice and how it unfolds in language.

The main difficulty has constantly been formulating other aesthetics, alternatives to binarism, and the intrinsic standardization of Al and the anthropocentric universe that forms the basis of modern science. It is important to say that Flora Rebellis and Flora Mutandis use the same machine-learning format (Style GAN2), however, they operate in opposite directions. In Flora Rebellis, I started with categories anchored in scientific racism, striving to simulate the eugenicist method of Galton in his composite portraits to make the rendering of a generic plant unfeasible. In Flora Mutantis, I appropriated the title of the seminal work on Brazilian botany, Flora brasiliensis (1840-1906), initiated by Carl Friedrich von Martius (1794-1868), to put into practice everything I learned with Flora Rebellis.

In a way, Flora Mutandis encapsulates the agenda of Botannica Tirannica: an ecosystem of a wandering science, which transitions between supposed reading errors where hybrid beings flourish, unnamed, rootless. A mutatis mutandis flora, that is, living by "changing what needs to be changed," like my Wandering, which became the symbol of the Botannica Tirannica project.



Giselle Beiguelman

Giselle Beiguelman is an award-winning artist, professor at the University of São Paulo and the author of several writings on digital culture. Beiguelman's recent work investigates the colonialist imagination using Al technologies, collections and preservation methods for digital archives, and the aesthetics of memory in the 21st century. She is the author of *Image Policies: surveillance and resistance* in the datasphere (UBU Editora, 2021; 2nd ed. 2023) and Memory of Amnesia: politics of oblivion (Edições Sesc, 2019), among others. Her works are part of the collections of museums in Brazil and abroad, such as ZKM (Germany), Jewish Museum in Berlin, MAC-USP, and Pinacoteca de São Paulo. She has received several national and international awards.

Beiguelman's recent artistic projects include Botannica Tirannica (2022), (De)Composite Collections (2021), None Monument and Chacina da Luz (2019) Odiolândia. Other related projects are the solo exhibitions Cinema Lascado, Caixa Cultural (São Paulo) and Quanto Pesa Uma Nuvem?, Galpão VB (São Paulo). She participated in the group exhibitions Unplace, Fundação Calouste Gulbenkian (Lisbon, 2015); the 3rd Bahia Biennial (Salvador, 2014); The Algorithmic Revolution, ZKM (Karlsruhe, Germany, 2004-2008) and, at the same institution, NET_Condition (1999-2000), and the 25th Bienal de São Paulo (2002). She was the curator of the award-winning demonumenta project Arquinterface: the city expanded by networks (Sesi Digital Art Gallery, São Paulo, 2015) and Tecnofagias (3rd 3M Digital Art Exhibition, Instituto Tomie Ohtake, 2012), among other exhibitions. She lives and works in São Paulo.



Dr. Jonathan Ferrier

Jonathan Ferrier, PhD, BSc, BA, is a Mississauga, Anishinaabe (Ojibwe) scientist and a Biology professor at Dalhousie University. He was a postdoctoral fellow and graduate student at the University of Ottawa, Department of Biology, The Montreal Botanical Garden, The New York Botanical Garden, The Ottawa Hospital, and Bruker BioSpin. Ferrier's Indigenous heritage informs his work in food, medicine, material culture and ethnolinguistics. He studies maternal fetal medicine metabolomics and the phytochemistry of native medicine for preeclampsia, diabetes, and cancer.

Ferrier continues with research and development contributions since 2008, collaborating in 16 countries. He has tested methods for assessing organism evolution using metabolomics and bioinformatics and has worked with clinicians and computational biologists for personalised medicine in healthcare billing systems in Ontario.

The Ferrier Lab is dedicated to ethnobotany, ethnolinguistics, taxonomy, ecotoxicology, conservation biology, phytochemistry, ethnopharmacology, metabolomics, disease diagnostics, for contributions to Indigenous rights, education, and appropriate healthcare.

Dr. Ferrier will publish an upcoming article on Botannica Tirannica.



Isaac Crosby

Isaac Crosby, also known as Brother Nature, is a Black/Ojibwa knowledge keeper, gardener and agriculture expert with a passion for teaching and sharing his knowledge of Indigenous food systems. He is part of a large family from the Ojibwas of Anderdon, a pre-confederation band of mixed Black/Indigenous people living near Windsor, Ontario. Crosby learned to farm and grow food with his grandparents and community, and has also formally trained in landscape agriculture. His work can be found across the Greater Toronto Area, where he has planted many Indigenous gardens with schools and community groups.

Crosby is the lead horticulturalist for the Indigenous Garden on the UTSC Campus Farm was initiated by Prof. Dani Kwan-Lafond (Sociology) in 2020, and manages the Three Sisters Garden and the medicine garden, open from early May to late October each year. He mentors students and Indigenous youth in Indigenous agriculture, teaching workshops about the benefits of using sister crops in the garden and medicine gardens. Crosby was the lead Indigenous gardener at Evergreen Brickworks for several years, and has been the garden expert on CBC Fresh Air.

Wandering

Wandering is the result of a combination of all the species of plants named collectively as "Wandering Jew" in various languages.

The legend of the Wandering Jew, a character of the narrative that has been part of the oral tradition of Passion Week since the 8th century, associates Jews with the martyrdom of Jesus Christ and implies that they are a people cursed to wander the Earth without respite.

Instrumentalized by the scientific racism of the 19th century, the figure of the Wandering Jew was recurrent in Nazi propaganda.

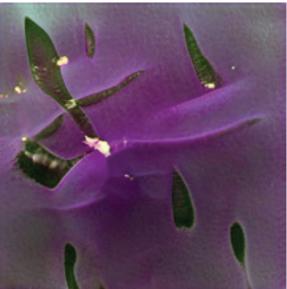
In contemporary philosophy, however, the wanderer, nomad or deterritorialized is someone who has the potential to destabilize centralized powers and their mechanisms of control.



lmage created with artificial intelligence (Style GAN2), inkjet print on Hahnemühle paper, 90 x 90 cm, 2022

The iteration of *Botannica Tirannica* at Koffler Arts included a selection of Al-generated images from the machine training process for the development of the work *Wandering*.





Inkjet prints on Hahnemühle paper, each 15 x 15 cm, 2021





Flora Mutandis

This series of images was created using artificial intelligence, with a dataset of plants with offensive common and/or scientific names that express different types of prejudice associated with body parts and cultural traits.

The nomenclature of the species of the series Flora Mutandis was generated algorithmically based on a shuffling of the original names of the species submitted to the machinic processing.

The title of the series refers to the publication Flora Brasiliensis (1830) by Carl Friedrich von Martius, the most important work of botany conducted in Brazil, and to the Latin expression "mutatis mutandis" which means "changing what has to be changed."

Images created with artificial intelligence (Style GAN2), inkjet print on Hahnemühle paper, 36 x 36 cm each, 2022





































EOSMABTA AITRALENOLUNNOH



OEAN AOMORPOENCTHO



AIRNAIMMYOIH PSOESTSIPA



CSOSRAAR SAPTPETEA



Flora Rebellis

This series of videos is based on datasets created of plants with names that are offensive and prejudiced toward people who are Jewish, Black, Indigenous, Romani (who have been called the pejorative name "Gypsies"), and women.

The machine learning process for developing their synthesis resulted in errors and the images behave almost like anti-deep fakes, contradicting a logic inherent to artificial intelligence and eugenicist thinking that eliminates differences and contradictions – in other words, that seeks perfection.

Flora Rebellis: Antisemitism Flora Rebellis: Anti-Black Racist

Flora Rebellis: Anti-Indigenous Racist

Flora Rebellis: Anti-Romani Flora Rebellis: Misogynist

Videos based on errors produced in the machine learning process of plants with Antisemitic, Anti-Black Racist, Misogynist, Anti-Indigenous Racist and Anti-Romani names. Each 1024 x 1024 px, 3 min, loop, single channel, second version, 2024







The Garden of Resilience

For Botannica Tirannica, two gardens were planted: one in the Koffler Arts gallery and one outside the Youngplace building in which Koffler Arts is situated.

The gardens include various species of plants, many considered "weeds," with offensive misogynist, racist, and Antisemitic names. These names are rooted in the colonialist desire to dominate nature and in the taxonomical nomenclature that anthropomorphizes plants, often by assigning them human characteristics, gender binarism, and sociocultural biases in prejudiced ways.

These plants existed before human language and categorisation. They grow, produce and spread their seeds, and adapt to new conditions. Through the millennia, they have resulted in countless new generations and a mind-boggling array of hybrids and entirely new species. These plants constantly evolve and, therefore, resist categorisation. They are resilient.

Leading up to the exhibition, Giselle Beiguelman met online with Dr. Jonathan Ferrier, who served as Indigenous Botanical Content Lead, and Isaac Crosby, who served as Head Gardener, to discuss plants that could be cultivated at Koffler Arts as part of these gardens. The plants included:

The Garden of Resilience (Indoor)

Plants, acrylic planters, laboratory glassware, plants, and derivates (dried flowers, oils, seeds, etc.), substrate. Koffler Arts version, 2024

Antisemitic

Scientific name

Common name

Cercis canadensis

Judas-tree



Indigenous name

Misko kanjiin (Anishinaabemowin/Ojibwe)

Historical studies refute Judas's role in Jesus's death, yet he symbolizes betrayal, fueling persecution against Jews, with the "Judas tree" possibly being the site of his demise.

Scientific name

Common name

Euphorbia milii

Christ's thorn



The plant gets its name from the legend that a crown of thorns was placed on Jesus Christ's head during his trial and his walk to crucifixion, feeding the myth of Jewish people as deicides.

Scientific name

Common name

Physalis alkekeng

Jewish cherry



The common name of this plant alludes to the yellow pointed hats that Jews were forced to wear in medieval Christian Europe to be identified, segregated, and oppressed.

Scientific name

Common name

Saxifraga stolonifera

Jew's beard



The small, white flowers of this begonia are associated with the beard of Jewish religious figures and contribute to their stereotyping.

Scientific name

Common name

Tradescantia zebrina

Wandering Jew



It alludes to the medieval legend that defined Jewish people as condemned to wander the world as punishment for their supposedly deicidal nature.



Anti-Black Racist

Scientific name

Common name

Carex secta

N----head



Uses the N-word and associates the shapes of this grass with supposedly phenotypic "Black peoples' traits".

Scientific name

Common name

Cotinus coggygria

Dusky maiden



Dusky, literally having dark skin, associates the dark burgundy red leaves and tiny flowers of this plant with stereotypes of Black women.

Scientific name

Common name

Dieffenbachia seguine

Dumb cane



While the name of this plant is not racist, the plant itself was used as a racist tool. Rebellious enslaved individuals on Caribbean plantations were punished by being forced to chew a piece of the stem which caused temporary speechlessness.

Scientific name

Common name

Rudbekia fulgida

N----head



One of a number of varieties typically called Black-Eyed Susan, this also bears a common name with the offensive N-word.

Scientific name

Common name

Solanum melongena

Black Beauty Eggplant



Eggplant is an ethnic slur for referring to Black people, used mainly in Italy, but also in the United States.

Scientific name

Common name

Tanacetum vulgare

Tansy



Indigenous name

Oshkiniikwebagoons (Anishinaabemowin/Ojibwe)

Tanacetum means "immorality" in Latin, but it carries important ritual significance for many African peoples and is used as an abortifacient in traditional medicine by First Nations.

Misogynist

Scientific name

Common name

Adiantum raddianum

Maidenhair fern



The name comes from the delicate, hair-like appearance of the plant's stems and leaves. It has a potentially sexist undertone, as it objectifies the human body by associating it with fragility and delicacy.

Scientific name

Common name

Cestrum nocturnum

Queen of the Night



The perfume that is released at night evokes stereotypes associated with sex workers.

Scientific name

Common name

Echinacea purpurea

Fragrant angel



Indigenous name

Ichahpe hu (Lakota)

White flowers are commonly associated with a supposed feminine purity that links white women to an immaculate condition, thereby connecting racism to a sexist perspective.

Scientific name

Common name

Ficus carica

Desert King Fig



The plant, used traditionally to treat various ailments, was converted into a delicacy by colonial trade and acquired sexist connotations, especially in Italy, where its fruit is associated with the vagina.

Scientific name

Common name

Hamamelis virginiana

Witch hazel



Indigenous name

Nsakemižinsh

A plant used by various Indigenous people in Canada and the USA for medicinal purposes, its Western name associates women, and their roles as healers, with witches.

Misogynist (continued)

Scientific name

Common name

Physostegia virginiana

Obedient Plant 'Miss Manners' - 🖔



The idea that women must have "good manners" sets judgmental expectations about their demeanor. Also, white and delicate flowers, often called virginiana in Latin, are commonly associated with virginity and white women.

Scientific name

Common name

Prunus virginiana

Chokecherry



Indigenous name Asasawemin

White and delicate flowers are commonly associated with virginity and white women.

Scientific name

Common name

Rudbeckia hirta

Black-eyed Susan



Indigenous name

Ozaaawaa-waabigwan

The name stems from a popular song by English poet John Gay (1685-1732) about a crying, lovelorn woman bidding her sailor farewell, implying women's complete dependence upon men. Black eyes are also associated with domestic violence.

Scientific name

Common name

Sansevieria trifasciata

Mother-in-law's tongue



(also Dracaena trifasciata)

It associates the bride's and groom's mothers with a malicious, gossiping figure who disrupts the couple's life.

Anti-Indigenous Racist

Scientific name

Common name

Acer saccharuma

Sugar maple



Indigenous name

Aninaatig Ziinzibaakwad; Ninaatik; Sinaamish (Anishinaabemowin/Ojibwe)

This tree has various medicinal and ritual uses for the First Nations. Colonialism erased its ancestral meanings by turning it into a national symbol of the conquering peoples.

Scientific name

Common name

Acorus calamus 'Variagata'

Sweet flag



Indigenous name

Wiingshkogwaasa (Anishinaabemowin/Ojibwe)

Indigenous people for generations have used this plant to treat digestive disorders and pain, however North American scientists have banned it because they view it as hallucinogenic.

Scientific name

Common name

Allium canadense

Canada garlic



Indigenous name

Bgoji-zhgaagwinsh

The ancestral ceremonial and healing uses of this plant are symbolically erased as its Latin scientific name assumes it as a national symbol.

Scientific name

Common name

Apocynum cannabinum

Indian hemp



Indigenous name

Zesabiins (Anishinaabemowin/Ojibwe)

Used by many Indigenous people to treat a wide variety of ailments, the plant is associated with drugs in Western nomenclature.

Anti-Indigenous Racist (continued)

Scientific name

Common name

Asimina triloba

Pawpaw



A fruit tree used by various Indigenous peoples of present-day North America for food, it has one of its common names directly associated with social segregation and discrimination: "poor man's banana."

Scientific name

Common name

Cornus florida

Cherokee Brave Flowering Dogwood



This common name appropriates the name of the Cherokee, an Indigenous people in the southeastern United States who were forcibly removed from their territories in 1838 brought on by the discovery in 1828 of gold in Georgia.

Scientific name

Common name

Elymus canadensis

Canada wild rye



Indigenous name

Mashkosiw

A plant with ceremonial and healing powers for the First Nations, the Western name of this plant erases its culture assuming it as a national symbol.

Scientific name

Common name

Eutrochium maculatum

Joe Pye weed



Joe Pye, actually Joseph Shauquethqueat, was a Mohican sachem (tribal leader) who used this plant to halt a typhoid fever epidemic that raged in colonial Massachusetts. The weedy adjective, nevertheless, diminishes the tribute paid to him.

Scientific name

Common name

Iris germanica

Indian Chief



One of the strategies of erasing Indigenous cultures is the anthropomorphization of nature, according to colonialist stereotypes.

Scientific name

Spigelia marilandica

Common name
Indian pink



Indigenous people have used the dried roots as a de-wormer and a hallucinogen. Colonialism quashed its traditional medicinal uses by turning it into an ornamental plant.

Scientific name

Common name

Viola canadensis

Canada violet

:Ö:

Used as charms and medicine by the First Nations, the Western name of this plant erases its culture assuming it as a national symbol.

Anti-Romani

Scientific name

Common name

Gypsophila oldhamiana

Manchurian baby's-breath



In Brazil, this flower is known as "Flor-cigana" (Gypsy flower), deemed racist due to its historical use as a derogatory label for the Romani people, perpetuating stereotypes of thievery and witchcraft.

Scientific name

Common name

Veronica officinalis

Common gypsyweed



The term "Gypsy" is racist due to its historical use as a derogatory label for the Romani people, perpetuating the mistaken belief that they came from Egypt as well as stereotypes of thievery and witchcraft.

2SLGBTQ+ Related

Scientific name

Common name

Lavandula angustifolia

Lavender



In 1952, a Republican US Senator used "lavender lads" to describe the perceived threat of homosexuals in government, leading to the "Lavender Scare," a witch hunt like the "Red Scare" against communists. In 1969, "Lavender Menace" was used to describe the perceived threat lesbianism posed to women's liberation.

2SLGBTQ+ Related (continued)

Scientific name

Common name

Saintpaulia ionanthus

Sapphic flower



The favorite flower of the legendary poet Sappho, born on the Greek Island of Lesbos. In the early 20th century, lesbians in Paris who celebrated the works of Sappho wore violets on their clothes as a secret symbol.

Scientific name

Common name

Viola tricolor

Pansy Craze



The term pansy was used, starting in the early twentieth century, as a derogatory term for effeminate gay men, especially the drag queens who frequented and enlivened New York clubs, an era referred to as "The Pansy Craze."

The Empire

Scientific name

Common name

Amelanchier alnifolia

Saskatoon serviceberry



The name "Saskatoon" comes from the Cree language, highlighting Indigenous resilience against colonial erasure. "Serviceberry" refers to the plant's blooming period, which aligned with early spring religious services and burial practices, showing colonial influence through religion.

Scientific name

Common name

Artemisia vulgaris

St. John's plant



The association with John the Baptist and the Christianization of the plant's uses have contributed to overshadowing and erasing its diverse cultural traditions and medicinal applications in other cultures, such as Chinese and Ayurvedic medicine.

Scientific name

Common name

Aruncus dioicus

Goatsbeard



In spite of the fact that the Latin specific epithet dioicus means "having the male reproductive organs on one plant, and the female on another," the Empire denies diversity by conditioning this plant to mirror male attributes.

Scientific name

Common name

Chenopodium bonus-henricus

Good King Henry



The scientific name is a tribute to the French monarch known as "le bon roi Henri" (Henry IV of France, 1553-1610) and highlights the power dynamics implicit in scientific nomenclature which subordinates Nature to the geopolitical forces of Empires.

Scientific name

Common name

Fragaria vesca

White Soul Strawberry



The common name highlights the supposed unique qualities of the strawberry variety, assuming whiteness as a distinctive quality.

Scientific name

Common name

Penstemon hirsutus

Hairy beardtongue



The name comes from the hairy staminode (a sterile stamen), resembling a tongue with a beard, reflecting the anthropocentric canons that view Nature as a territory to be conquered and reshaped in the image and likeness of humans.

Scientific name

Common name

Rumex sanguineus

Bloody dock



Its scientific and common names reflect anthropocentrism, which views Nature as a mirror of humans, mistakenly equating its red veins with blood.

Scientific name

Common name

Viola pubescens

Downy yellow violet



Colonists erased the Indigenous medicinal uses of this flowering plant by using it as ornamental ground cover. The Latin term, pubescens describes the "downy" or "hairy" edges of the leaves, a reference to hair growth during pubescence, especially around genitalia.

Scientific name

Common name

Withania somnifera

Ashwagandha



In Sanskrit, the name of this plant means "the smell and strength of a horse," alluding to its importance in India and Ayurvedic medicine. Its Latin nomenclature erases its cultural significance, reducing to its sleep-inducing properties.





Specimens

The Garden of Resilience is a space, both inside the gallery and outside the building, that is a habitat for living plants with names borne of prejudice. In many cases, the scientific names in Latin are offensive, like Clitoria ternatea which anthropomorphizes plant anatomy (or phytotomy) based on misogyny; or Bertholletia excelsa, known popularly as Brazil nut, but sometimes called "N----- toe". But common names in English may be offensive, like "Wild pansy" which is an often-used homophobic slur. And the offence may result from the trivialising of plants significant to another culture, just as Indian pipe was used by many Indigenous nations of North America as an analgesic, anticonvulsive, and sedative, but was transformed by settlers into an ornamental plant.

Here are a selection of specimens in antique bottles and jars – dried flowers and leaves, extracts, nuts and seeds – of some plants that grow in the local climate and others that cannot grow in this climate.

Scientific name

Acer saccharuma Aralia nudicaulis Aralia racemosa Bertholletia excelsa Carex comans Cercis siliquastrum Cestrum nocturnum Chelidonium majus Cirsium arvense Citrus hystrix Clitoria ternatea Corchorus olitorius Hamamelis virginiana Ilex vomitoria Iris germanica Lavandula angustifolia Monotropa uniflora Pedicularis densiflora Petiveria alliacea Tanacetum vulgare Veronica officinalis Viola tricolor

Common name

Sugar maple Wild sarsaparilla root Indian root N---- toe N----head Judas-tree Queen of the Night Nipplewort Canada thistle K----- lime seeds Clitoria Jew's mallow Witch hazel Indian black drink Indian Chief Lavender Indian Pipe Indian warrior herb Guinea hen weed Tansy flower Gypsy weed Wild pansy





Wild Flowers of Canada

This book, on loan from the Baldwin Collection of Canadiana housed at the Toronto Reference Library, is a compilation of a weekly series of 18 parts with 16 colour plates each, totaling 288 colour plates, with additional black and white illustrations. The colour plates are printed within red line borders on one side of the leaf and are accompanied by informative text.



Wild Flowers of Canada, ca. 1895. Published exclusively with the Montreal Star, by special artists and botanists, issued in a weekly series of 18 pt. with 16 plates each. Courtesy of Toronto Public Library.

Soundscape

For Botannica Tirannica, artist and composer Gabriel Francisco Lemos developed a generative algorithmic composition using a method analogous to the one employed by Giselle Beiguelman in Flora Rebellis videos series.

Gabriel Francisco Lemos, Soundscape, generative algorithmic composition, 10 min, loop, 2022.

Poisonous, Noxious and Suspicious

In recent years, fungi have become a pivotal turning point in the ongoing reassessment of nature and the superior hierarchy traditionally assigned to humans among living beings. Recognized as a separate kingdom in taxonomy, their mycelia—the filamentous structures that support and nourish them—are considered "the internet of nature."

Fungi, complex organisms that are neither plant nor animal, and particularly mushrooms, have been stigmatised for millennia as symbols of filth and deadly poison. They were central to Nazi Antisemitic pedagogy, starring in the most important children's book, *Der Giftpilz (The Poisonous Mushroom)*, with text by Ernst Hiemer and illustrations by Philipp Rupprechtby, published by Julius Streicher in 1938. With captioned caricatures and drawings, the book taught that Jews cannot be trusted.















Garlic is another vegetable commonly associated with Jews. In Germany, some Antisemitic imagery from the Middle Ages and Renaissance depicts Jews holding garlic in one hand and, at times, holding a bag of money in the other hand. During the Spanish Inquisition in the 1490s, Jews were so closely associated with the consumption of garlic that merely eating garlic could draw suspicion and single out Jews for torture and death.

Images created with artificial intelligence (LLM - Large Language Models), inkjet print on Hahnemühle paper, 70×56 cm each, 2024







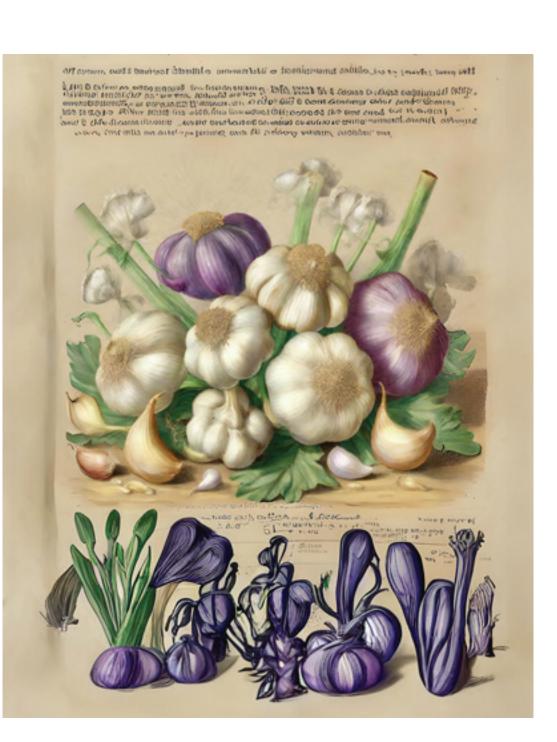


















Taxonomy is a Technology of Power

Botannica Tirannica is punctuated by a series of phrases on LED signs that serve as traces left by the extensive research carried out for the exhibition. Situated in interstices—openings in the walls, at floor height, in the interior and exterior of the garden area, and at the exit of the exhibition—they are potential keys to understand the space. As conceptual statements, the phrases are:

But what about things that fall outside the pattern?
Every weed is a rebellious being
Nomenclature is a ritual of erasure
Taxonomy is a Technology of Power

All luminous LEDs, monochromatic, green sign, 70 x 20 cm, 2022







A Genealogy of Prejudice

The essay film combines images from different archives with critical reflection and condenses the vast research conducted over a year and a half for the exhibition Botannica Tirannica. A key piece of the project, the work discusses the forms through which racial, cultural, and gender prejudice has become scientifically based since the 19th century, ultimately contaminating the collective imagination with ramifications in language, vocabulary, and aesthetics. This investigative immersion reveals a way of seeing and expressing the world, still present in cutting-edge sciences, such as the genetic improvement of plant species and Artificial Intelligence. The film questions the spectrum of racial eugenics and the possibility of consolidation of machine eugenics as assimilated into systems of standardisation.









Essay film, 16:9, colour, Full HD, stereo, 15 min., loop, original 2022, updated 2024

In order of appearance or citation:

Antonio Lafuente and Nuria Valverde, Michel Foucault, Carl von Linné (Linnaeus), Carl Friedrich Von Martius – Coleção Brasiliana Itaú, Homanianos Heredes – Biblioteca Nacional, Wikimedia Commons, Instituto Moreira Salles, Nativas Digitais – Unitins, Warren Dean, Kew Gardens, Claude Monet, Musée de l'Orangerie, Abdellatif Kechiche, Google, Georges Méliès, Holocaust Encyclopedia, Bibliotèque Nationale de France, Carl Veidt, British Film Institute, Biodiversity Heritage Library, Linnaean Collections – Linnean Society London, Lilia Schwarcz, Johann Friedrich Blumenbach, Samuel Morton, Charles Darwin, Agustín Fuentes, Francis Galton, Efram Sera-Shriar, Fiocruz, Alfred W. Crosby, Monsanto, Greenpeace, Cassey Ho, Tero Karras, Galton Laboratory Collections – Wellcome Collection, Aliaksandr Siarohin, Tomaz Mastnak, Julia Elyachar and Tom Boellstorff

Narration:

Ricardo, Vitória and Fernando (Al robots)

Background sound:

NASA's Perseverance Mars rover used its SuperCam microphone to listen to the Ingenuity helicopter on 30 April 2021 as it flew on Mars for the fourth time.

EVERY WEED IS A REBELLIOUS BEING

If one had to sum up *Botannica Tirannica* in a single phrase, it would be: "Every weed is a rebellious being". In summarising the defiance and resilience in play in the exhibition, the phrase condenses the prerogatives of the project and the exhibition. Like the sorts of weed cursed by colonial extractivism, the phrase spills out from the exhibition space, into the Garden of Resilience outside Koffler Arts at Youngplace, entangling the inside with the outside, the life of the city with the main theme of the exhibition.

Conceived of by Giselle Beiguelman, urban intervention, flyposter on billboard (first iteration, realised by Brett Despotovich), vinyl (second iteration, realised by Josh Heuman), 2.44 x 2.44 m, 2024









Exhibition Credits

Koffler Arts, Toronto

30 May - 20 October 2024

General Director: Matthew Jocelyn Exhibition Coordinator: Josh Heuman

Indigenous Botanical Content Lead: Dr. Jonathan Ferrier Head Gardener, The Garden of Resilience: Isaac Crosby

Installation Technician: Brett Despotovich

Graphic Designer: John Caswell Graduate Fellow: Moyu Chen

Photography: Jeremie Warshafsky and Toni Hafkensheid

Museu Judaico de São Paulo (28 May - 18 September 2022)

Executive Director: Felipe Arruda

Curator: Ilana Feldman

Curatorial Assistant: Mariana Lorenzi

Producer: Carla Ogawa, Patricia Betti,

Fernando Gallo and Debora Setton

Expography: Helena Cavalheiro Graphic Designer: Maria Cau Levy

Gardner: Bruno Araújo

Light Design: Fernanda Carvalho Lighting

Additional iterations of Botannica Tirannica

3rd Karachi Biennial, Pakistan (2022) Sartorio Museum, Trieste, Italy (2023) SESC Taubaté, State of São Paulo, Brazil (2023) Art Science Technology Museum, Federal University of Santa Maria, Rio Grande do Sul, Brazil (2023)

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