



BLACK
BEES
MATTER



A PROJECT FOR THE PROTECTION OF THE SICILIAN BLACK BEE SPECIES

To support university studies, research and experiments
aimed at health and wellbeing



Sustainability and environmental protection, together with **corporate social responsibility**, are issues that are now concerning the whole world. There is a growing awareness that in order to achieve a higher quality of life, sustainable development and a better, cleaner environment are essential.

The younger generation, together with businesses, are proving to be increasingly sensitive to the '**green**' issue: the **ecological-environmental** topic concerns everyone and for this reason it is important to support the education of individuals and the community, in respect of nature, defense of animals and protection of their rights.



**ENVIRONMENTAL
PROTECTION**



ENVIRONMENTAL SUSTAINABILITY

The term **Environmental Sustainability** was initially used in 1992, during the first UN Conference on the environment, to indicate a development model to meet the requirements of the present, without compromising the ability of future generations to meet their own needs. It has undergone a gradual evolution over the years, acquiring a wider meaning, placing the environment in relation to economy and society.

Environmental Sustainability is also currently considered an essential starting point as a new approach to business. Increasingly, it is an integral and decisive part of the strategy of many companies; a precise commitment to respect the environment, which manufacturers, throughout the industrial sector, take into account.



RESPONSIBILITY

The term **Corporate Social Responsibility (CSR)** means adoption of a corporate policy, whereby economic objectives work in harmony with social and environmental responsibilities, with a view to sustainability and the aim of **preserving the environmental, social and human heritage, for current and future generations**. It is a self-regulated **business model**, allowing companies to be socially responsible towards themselves, their stakeholders and the public.





THE IMPORTANCE OF BEES IN THE GREEN PERSPECTIVE

In this 'green' perspective of environmental protection, the bee is an important **representative of nature**. The role of bees in our ecosystem is fundamental for food production and for the environment. Insects - in particular pollinators - play a crucial role on the Planet, for the protection of biodiversity, as well as agriculture. They are an integral part of our food system, as they pollinate cultivated plants which end up as food on our tables.

Pollination is one of the most important ecosystem services provided by nature, both for human well-being and the economy. Let us look at some bee facts and figures, in terms of their industrious work:

Nearly **90%** of all wild flowering plants depend to some extent on animal pollination

4.000 plant species survive thanks to bees and pollinating insects (bumblebees, butterflies, moths and hoverflies)



Of the approximately **1.400** plants that produce food and industrial products in the world, almost 80% require pollination by animals: not only domestic and wild bees, but also wasps, butterflies, moths, beetles, birds, bats and other vertebrates which contribute to the pollination process

Honey bees - both wild and domestic - perform about **80%** of all pollination worldwide

Wild bees alone - over 20,000 species - guarantee the pollination of flowers, on which **35%** of world agricultural production depends, with an estimated economic value of over 153 billion euros each year globally and 22 billion euros in Europe

A single bee colony can pollinate **300** million flowers each day (cereals are primarily pollinated by the wind, but fruit, nuts and vegetables are pollinated by bees)

Over the past 50 years, the volume of agricultural production has increased by **30%**, thanks to the direct contribution of these little pollinating animals. Their health also has far-reaching implications for all humanity

Research shows that more than **70%** of the vitamin A in our diet comes from fruits and vegetables, much of which is heavily dependent on pollinators



BEES AND RESEARCH

Speaking of **research**, in relation to the subject of bees, it is important to consider three prevailing aspects: **the protection of the species**, the **benefits** deriving from **hive products** and the **use** of derivatives that, according to some studies, seem to contribute to the **well-being of people suffering from certain diseases**. For example, treatments of bee venom, (apitoxin), have been proven to help patients suffering from multiple sclerosis.

Some countries, such as Romania, carry out constant **research and study** and regard **beekeeping** as a **sector of great interest**. The **hives** are considered **natural pharmacies** and **apitherapy** is **welcomed** as a **treatment**, especially for its **lack of side effects** and low cost. **The cosmetic industry also realises the potential of bees** and considers propolis and other honey derivatives to be important remedies for treating acne and aging skin.



RESEARCH



THE RISK OF EXTINCTION

Since the **late 1990s**, many beekeepers (especially in Europe and North America) have observed a **sudden decrease in bee colonies**. In Europe, a study reported that annual European bee deaths reached 30-35% and **the number of bee colony numbers per hectare decreased by 25%**.

This decline in bee colonies is the consequence of multiple factors, which act individually or in combination with one another: loss of biodiversity and natural habitats, pollinators in decline, monocultures, genetically modified organisms, use of pesticides and chemical fertilizers, destructive agricultural practices, pollution caused by waste, diseases, parasites and changes in climate patterns, which modify the natural cycle of ecosystems, making bees more vulnerable and less productive. **Industrial agriculture increasingly threatens our Planet** and **some pesticides**, in particular, **pose direct risk to pollinators**.





EXTINCTION



By restoring healthier bee populations, **ecological agriculture improves pollination**, which in turn improves crop yields, takes advantage of the natural ecosystem services, water filtration, oxygen production, disease and pest control.

The **farmers** themselves **have advocated research and funding by industry and government, in order to develop organic farming techniques**, improve food production and maintain ecological health.



THE WORLD BEE DAY

Slovenia proposed to the United Nations (UN) that they should proclaim May 20 as World Bee Day.

On 20 December 2017, following three years of efforts at international level, the UN Member States unanimously approved Slovenia's proposal, thus proclaiming 20 May as World Bee Day.



SUPPORTING BEES

Many national and international associations, have joined **green initiatives** and **fight for the protection of nature and the environment**. They have launched **awareness campaigns all over the world**, aimed at communities and companies, asking for **greater attention to the Planet**, thus proving that the **green approach** now **impacts on the strategic choices of various organizations and / or companies**.



INSTITUTIONS – NATIONAL ASSOCIATIONS

Associazione Allevatori A.M. Siciliana (of which Nero d'Ape is an associate)

F.A.I. Federazione Apicoltori Italiani

UNA-API Unione Nazionale Associazioni Apicoltori Italiani

Istituto Nazionale di Apicoltura It promotes and implements initiatives that increase, enhance and develop beekeeping farms and derived products.

Osservatorio nazionale del miele It carries out a monthly survey of honey production and wholesale prices, as well as publishing an annual report on production and market trends.

Apimondia International Federation of Beekeepers'Associations

Istituto Zooprofilattico Sperimentale delle Venezie



Morgan Freeman
actor



Beyoncé
singer



THE SICILIAN BLACK BEE

Among the many species of bees present in nature, a particular one in Italy, deserves special attention: The Sicilian Black Bee.

Known as **Sicilian Apis mellifera**, it is a giant black bee, with a very dark abdomen, a yellowish down and small wings, unlike the Ligustica bee which has a yellow livery with black stripes. It is very industrious, has a tendency to swarm and is a heavy user of propolis; it is not genetically modified, nor an exotic species.



It is an ancient insect, found specifically in Sicily, with its natural distribution areas in the provinces of Trapani and Palermo.

Sicily has been the home of the Black Bee for millennia, but it was in danger of extinction after being abandoned in the 1970s. Sicilian beekeepers got rid of their traditional, rectangular beehives made from dried fennel stalks and began importing the 'Apis mellifera ligustica' from northern Italy. Continual use of chemicals in agriculture, also contributed to its **near-extinction**.

Fortunately, **this was prevented by the research of a Sicilian entomologist, Pietro Genduso** who studied them for years, after the classification of the species by Montagano in 1911. Genduso **transmitted his passion** to a student, **Carlo Amodeo**, who is **still a breeder of pure Sicilian queen bees** and one of the founding members of the Associazione **Allevatori Apis Millifera Siciliana**, of which **Nero d'Ape** is an **associate**.



THE ASSOCIAZIONE ALLEVATORI APIS MELLIFERA SICILIANA

Established in 2012, this **voluntary and nonprofit**, Association **promotes the protection and conservation of the native Sicilian Apis Mellifera species**, in order to prevent its extinction and increase its genetic variability.

It implements numerous **initiatives** for the benefit of its associates, by organising **conventions, conferences, courses, studies and research**, in relation to various issues. These include the breeding techniques of queen bees, pure breeding, the management of protected areas for the protection of the genetic heritage of the Sicilian Apis Mellifera and many more.





THE QUEEN OF BEES

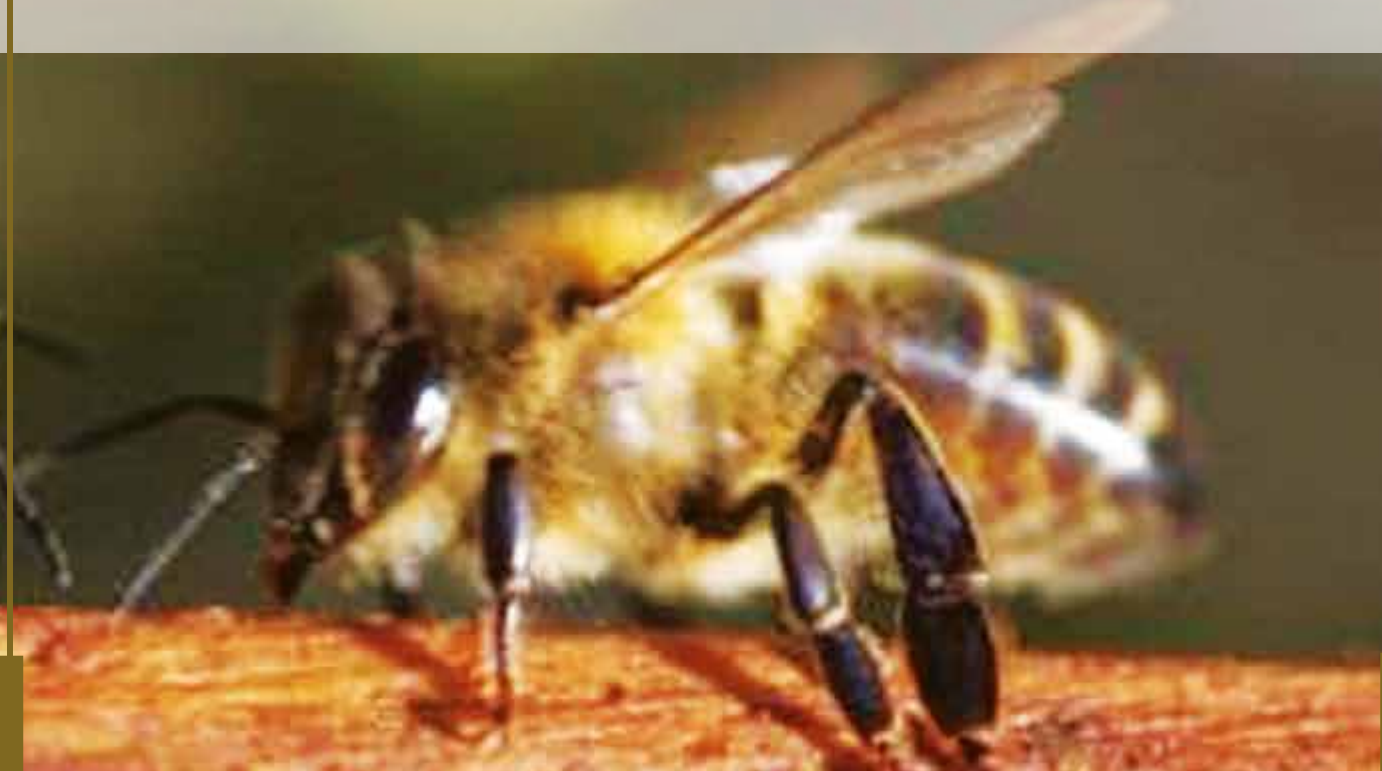
According to famous beekeepers, **the Sicilian Black Bee is unsurpassed in so many ways**, compared to other species. **From a production point of view**, it continues to be active even in the hottest periods, tolerating changes in temperature and peaks of 40°, while other species of bees stop producing.

Furthermore, **it develops the brood early**, between December and January, avoiding the break in the winter period, common to other species of northern bees.



Compared to other bees, who have a weaker immune system, the Sicilian Black Bee is **resistant to diseases**. This is because it has a greater genetic variance thanks to its African origins, which means it has a higher number of genes, which guarantee reactivity and physical resistance against infections.

It has a very low consumption of honey, compared to other bees and this allows, with the same stock, a greater probability of survival of the bee hives in periods of poor harvest. **It is perfectly able to adapt to the regional environment** and plays a key role in the pollination of the Sicilian endemic flora.





It has a **strong self-defense capacity**, so it hardly has a tendency to loot and is **approved** by greenhouse growers **for the pollination of protected crops**, in environments such as tunnels, where large temperature changes can occur, which has no effect on these bees.

The **unique evolutionary history of the Sicilian Black Bee is the reason for considering the subspecies as a genetic resource to be highly valued, by protecting it from the continuous importation of other non-endemic subspecies.**



The conservation of indigenous subspecies is of great importance, not only for economic reasons, but also from the perspective of safeguarding biodiversity, since wild colonies of honey bees are close to extinction. **For its history and its territoriality, the Sicilian Black Bee represents the bee par excellence which adapts to its habitat**, resists and survives despite being in decline and continuously threatened by pesticides, monocultures, parasites, diseases and climate change.

The Sicilian Black Bee **represents salvation, territoriality, the environment and the balance of the ecosystem**. It has become a **symbol of productivity and exclusivity** and the purely organic honey, Nero d'Ape, is the result of its industrious work. The Sicilian Black Bee **evokes the meaning of 'nature to be protected' and assumes the role of 'Queen', among the various species of bees, for its quality of work and its characteristics.**

The life of bees appears as a poem, a symphony of harmonised movements, so as to seem to many as a work of art. It is 'simply' nature, a nature that cannot be destroyed, but which must be preserved, together with its balance and its laws.

THE SUBLIME HONEY

The organic honey, Nero d'Ape, produced by the Sicilian Black Bee, is considered a sublime natural product, a food with high nutritional properties and beneficial effects on the organism. It is a fine example of Sicilian Heritage and is a fundamental part of Presidia Slow Food, an institution which sustains quality produce at risk of extinction, protects unique regions and ecosystems, recovers traditional processing methods and safeguards native breeds, as well as local plant varieties.

There are about 300 beehives presently in eastern Sicily, where Sicilian bees annually produce an average of between 9000 and 13000 kg of honey. **This golden nectar, 100% made in Sicily, is considered more precious and nutritious than the New Zealand Manuka honey, famous worldwide for its properties. Sweet and velvety, it is also a real concentrate of beneficial properties: polyphenols and antioxidants (three to ten times more than the standard), but also containing antibacterial and antifungal substances not present in other types of honey. It is highly nutritional and has high antioxidant capabilities, 30% more than other similar products. It has anti-proliferative effects on tumour cells and is effective in reducing lipid and protein radicals.**

Nero d'Ape is flavoured with raw materials and non-essences and its production has different combinations, for example, cardamom and vanilla, orange peel and vanilla, star anise and cinnamon, rosebuds, ginger and cloves, lavender and vanilla.





THE PROJECT

BLACK BEES MATTER



THE PROJECT

The project aims to guide companies along a journey, increasing its brand awareness/visibility in the reference market, by joining **an ethical cause: the protection of our Planet.** It confers a high sense of corporate social responsibility on the company, perceived by the reference market as **innovative, 'green' and sensitive to environmental issues.**



By embracing the project, the company gives a sustainable footprint to its business, restoring 'a value' to the **Planet** and thus increasing the perception of the company as 'ecological' by its target audience. By joining **green initiatives**, a company acquires a **competitive advantage on the market**, gaining the trust of customers / prospects, who empathise with the brand.

Eco-sustainability becomes a corporate value and environmental protection one of the main missions.

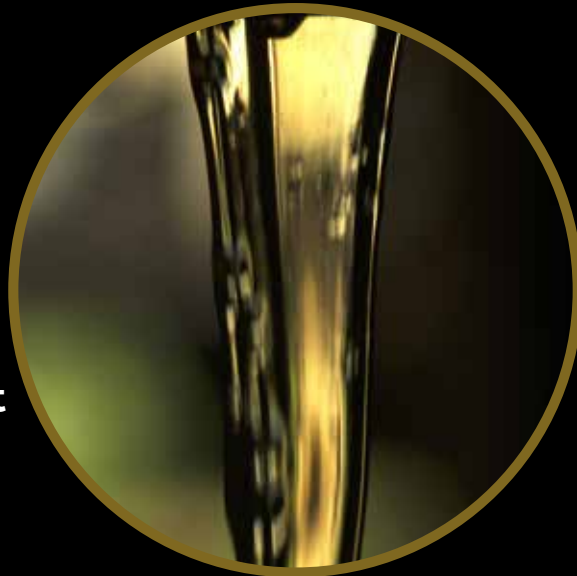




THE PROJECT BLACK BEES MATTER

Companies will have access to the honey, Nero D'Ape, only after joining the project. The **honey cannot** in fact **be bought and / or sold**, but only donated as a gift, as it is the result of a **noble, ethical and nonprofit project**. It can be labelled ad hoc (also co/branded) and donated as a gift to its customers / suppliers / friends.

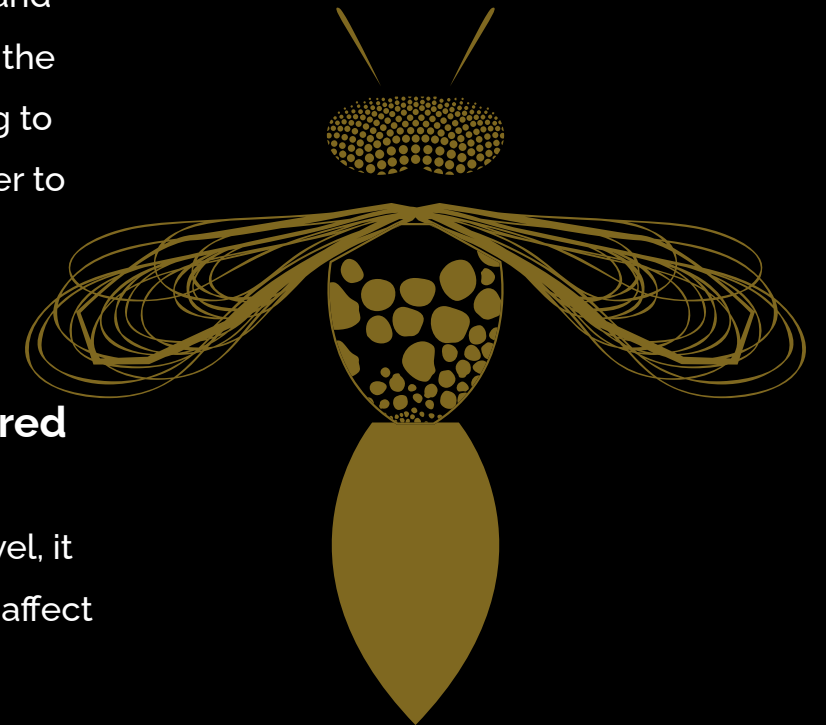
The project represents an investment in terms of social currency: those who are positively impressed by the brand and by the actions carried out by it, talk of it and implement one of the most important marketing levers: **word of mouth**.



Another very important **factor**, is determined by the **virality of the project**, which becomes a **powerful communication tool**, in an era where **social media plays a very important role**.

At this moment in time, more and more people are interested in the future of our planet and willing to change their behaviour, in order to be more sustainable.

Ignoring the issue of sustainability is considered unpopular today: at a sociological and marketing level, it is a negative factor that could affect the company's turnover.





BLACK BEES MATTER SUPPORTING RESEARCH



PROTECTION OF THE SPECIES AND SUPPORT TO RESEARCH

By choosing to join **Black Bees Matter**, in addition to protecting the **Sicilian Black Bee species**, you will be **supporting basic, experimental studies and university research, aimed at better health.**



The project provides **specific actions**, in **collaboration with Universities, Research Institutes and Associations***, through which to identify and discover new goals on the subject, as well as implementing existing studies, making an **important contribution to the field of well-being, health and healthcare.**

* Associazione Allevatori A.M. Siciliana (of which Nero d'Ape is an associate)

* Istituto Biologia Cellulare dell'Università degli Studi di Palermo

* Istituto Zooprofilattico della Sicilia



EUROPEAN UNION AND GREEN REVOLUTION

The EU believes more and more in green and eco-sustainable business projects. In Italy, with the new budget laws, numerous funds have been allocated for investments to carry out economically sustainable projects.

Their objectives are decarbonisation of the economy, the circular economy, support of young entrepreneurs, the reduction of plastic use and its replacement with alternative materials. They also include urban regeneration, sustainable tourism, adaptation and mitigation of risks on the earth deriving from climate change and, in general, investment **programmes and projects with an innovative nature and high environmental sustainability, which take social impacts into account.**

We speak, literally, of a **'green revolution'** and many companies, coming from the most diverse sectors, have invested in redevelopment, so much so that now we come to talk of 'green-washing'.



GREEN REVOLUTION



blackbeesmatter.com

The **Black Bees Matter** project was born from the collaboration between
CC LAB and **NERO D'APE**



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