



cyclica

FROM NATURE TO NATURE

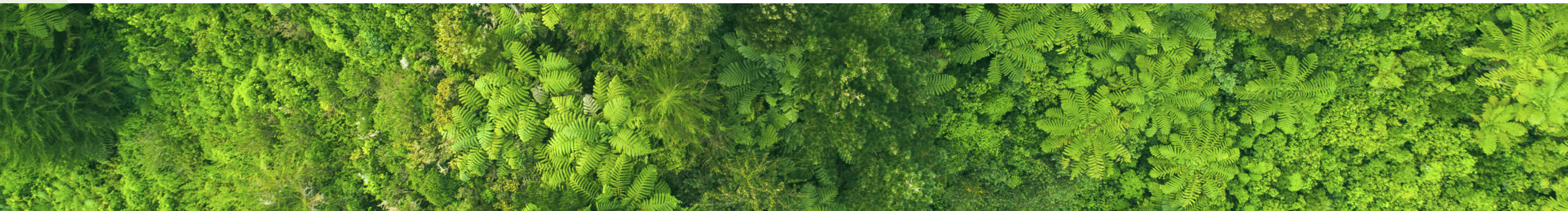
OLEUM LEATHER IS BIODEGRADABLE

Cyclica Srl

INNOVATION AND SUSTAINABILITY

CONTENTS

	PAG.
• What sustainability means for cyclica	3
• Biodegradable leather: oleum	4
• Fighting against pollution with: oleum	7
• oleum 's raw materials and Traceability	9
• Our mission	11



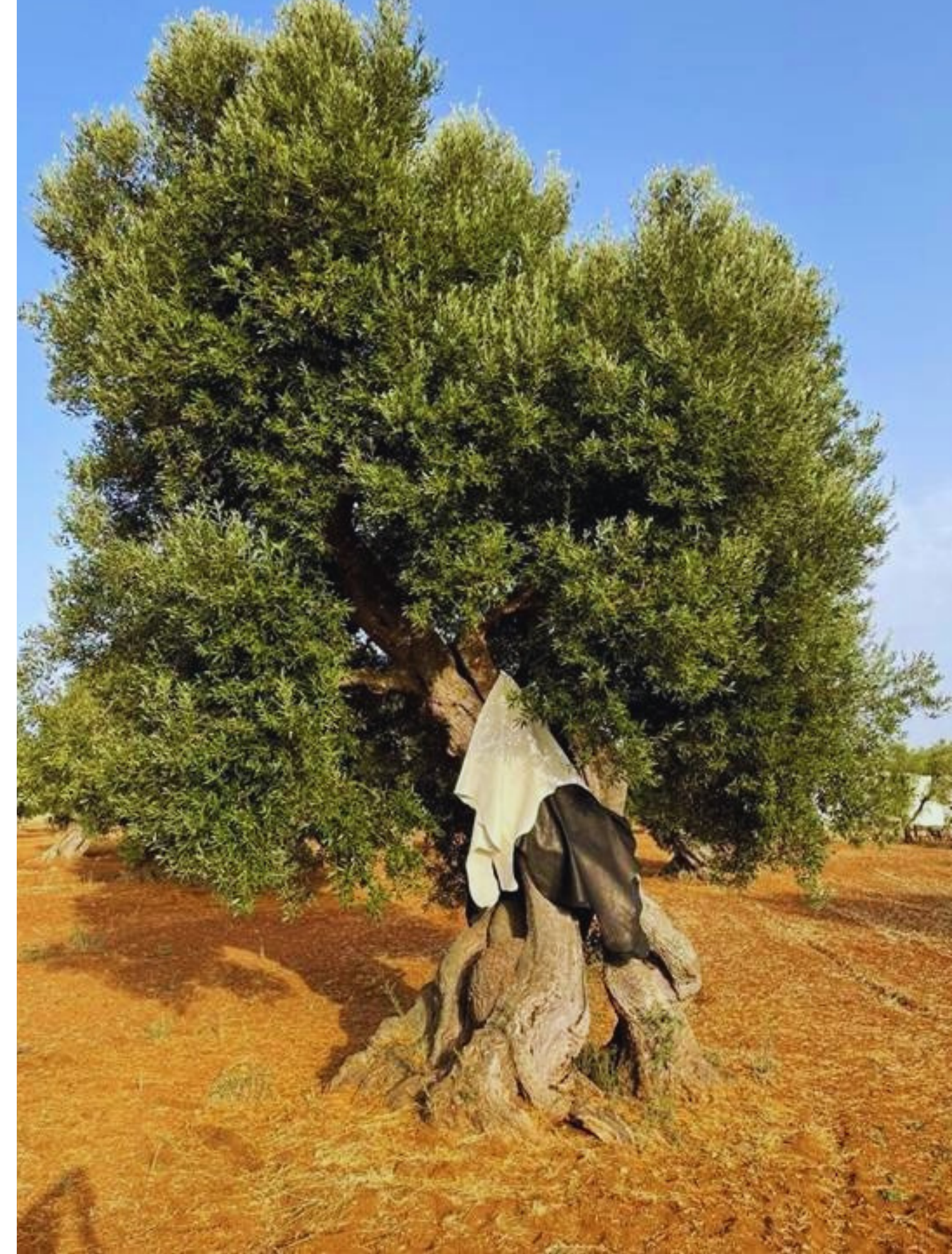
WHAT SUSTAINABILITY MEANS FOR CYCLICA

In a world where words are inappropriately used, it is important to establish the meaning of sustainability and the goal we pursue.

For us, sustainability is:

1. Improving workers' conditions.
2. Reducing the pollution impact of the production process.
3. Disposing of the of end-of-life finished products within a circular and natural ecosystem.

Transform polluting waste into new raw materials.



oleum : FINISHED PRODUCT

Biodegradable without compromise on performance and durability, since the biodegradability process only takes place in specific monitored conditions (including bacteria, temperature, humidity ...).

Unrefined	Article	Colour	Thickness
Bull	Full-grain smooth	Black or white	From 0,5 to 1,3
Bull	Full-grain natural	Black or white	From 0,5 to 1,3
Bull	Nubuck	Black or white	From 0,5 to 1,3
Bull	Hammered grained leather	Black or white	From 0,5 to 1,3
Bull	Hot pressing (a variety)	Black or white	From 0,5 to 1,3
Bull	Apis (waxed)	Black or white	From 0,5 to 1,3

The article is malleable to the client's needs (softness, shininess, etc.) in combination with our consultation to obtain different biodegradable variants.

The product in its variants is destined for clothing, footwear, leather goods and furniture.



BIODEGRADABLE LEATHER **oleum**

After years dedicated to research we have finally obtained a high-performance and biodegradable material.

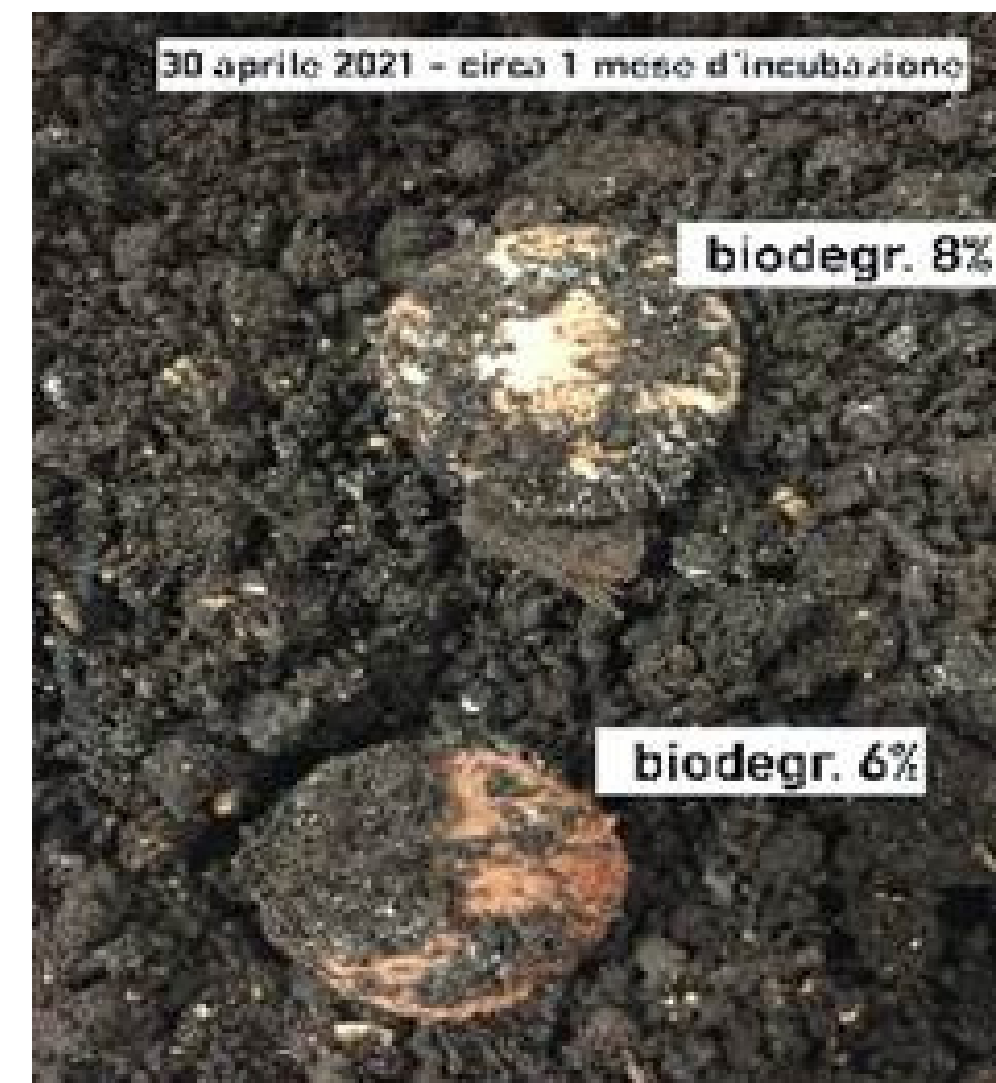
The first test on the material and its following results are the outcome of a research that took place in collaboration with the department of sciences and agroindustrial technologies of the University of Bologna.

Once the correct combination had been identified, to officialize the project we repeated the same tests in a laboratory that is certified by the institution Accredia: LAB-CONTROL.





The result that positively surprised the lab technicians too was more than 98% biodegradability within 3 months. The law, defined by the European parliament UNI EN ISO 14046, states that biodegradability is the metabolic conversion of a compostable material into carbon dioxide. This characteristic is measured with a standard method: the EN 14046 (also published as ISO 14855: biodegradability in specific conditions of controlled composting). The acceptance level equals to 90% to be reached in less than 6 months, we outclassed it.



FIGHTING AGAINST POLLUTION WITH oleum

FROM NATURE TO NATURE

- We do not use salt in the first phase of leather conservation. This technique has been used for centuries in the tanning world, but when used in an industrial quantity, salt becomes a polluting element.
- Compared to the traditional methods, our production process does not involve the use of chemical products containing aldehydes or heavy metals (chromium, mercury ...). As a result the waste water can be easily disposed of: the tests confirmed that such waste water has the predisposition to become irrigation water for vegetable cultivation, in such way completing its own life cycle and going back to nature (Cyclica).





- The obtained product is “oleum” which is BIODEGRADABLE therefore all of its waste (powders, cut outs, trims from the tailoring process, etc.) or the product itself once used and worn out, concludes its life cycle with a simple disposal without negatively impacting on the nature they derive from (Cyclica).
- Around 5 million tonnes of AVO, wastewater from the oil production, have to be disposed of each year: they are considered as some of the most polluting waters in the food industry. Oleum is based on a process that refines the antioxidant properties of AVO. The life cycle is concluded with its transformation in organic fertilizer for nature (Cyclica).

oleum'S RAW MATERIALS AND TRACEABILITY

Circular industry: from polluting materials to resources

- Leather is one of most ancient circular materials. Livestock is not raised for leather and the disposal of the latter should take place through combustion, causing large environmental damage. Instead of producing synthetic materials, it is more sustainable to work with natural fibres.
- We pay a lot of attention to livestock territories. We do not purchase unrefined leather originating from countries where deforestation is taking place. Including all of South America, and all animal farms with interesting “certifications”.
- The leather used for oleum has European origins and only comes from certified slaughterhouses. They are delivered fresh and not salted, following a strict programme that avoids its deterioration. We are able to grant area traceability for each product batch.





- As previously mentioned we obtain the tanning product through the refinement of the waste from the oil industry.
- The tannery where all the chemical processes and most of the mechanical processes take place is LWG certified with the maximum obtainable result GOLDEN MEDAL, very few facilities have this honour. LWG represents the reference benchmark for leather performance and durability as the biodegradability process only happens in specific atmospheric conditions (including bacteria, temperature, humidity ...).
- All processes that are carried out on the leather take place in Italy. Made in Italy 110%.



CYCLICA'S MISSION AND THE OLEUM PROJECT

EXPERIENCE AND INNOVATION FOR
A FUTURE TOGETHER SUSTAINABLE

cyclica  oleum



- The Cyclica business model is based on the end-to-end governance from the unrefined material to the finished product, where the concept of sustainability and circularity is pervasive.
- For too many years leather tanning has polluted the environment that we are a part of. With the new technologies and a glance at the past, it can be changed.
- Cyclica proposes itself with its exclusive process and its resulting product Oleum, to revolutionise the environmental impact of the tanning process for the fashion and luxury industry.
- The process is not only theoretical, but has already been industrialised to large scale and tested.
- We are working towards establishing a closed circuit water reusing process within the tannery.
- We are working on various projects, all biodegradable. We want to grant cyclic nature processes.
- Cyclica aims to propose sustainable materials without giving up performance.



**STOP
POLLUTION**

