



## OXFORD BOTANIC GARDEN'S BOTANICAL POP QUIZ



Oxford Botanic Garden and Arboretum is passionate about sharing the scientific wonder of plants with the world. Plants are essential for life on earth. They provide us with food, raw materials, medicines and are invaluable in their natural ecosystems to support other life - but sometimes our collective knowledge on them is a little lacking.

This quiz is a fun way to get your friends and family together and see who is the most botanically minded, whilst learning about some fascinating plant specimens from around the world.

The quiz is made up of four rounds. The first three rounds have ten questions in each and the final round has fifteen questions.

The final round is a Nearest Wins round. This means that the answers are all numerical, and whoever gets the closest to the actual answer wins. If someone gets the correct answer they get a bonus point.

Don't forget to tag us online #oxfordbotanicgarden  
and let us know if you enjoy our quiz!



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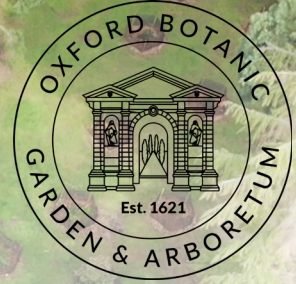


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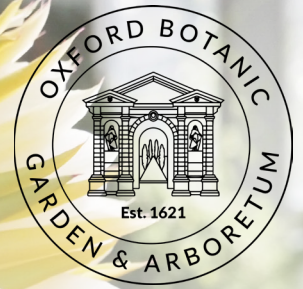


# *OXFORD BOTANIC GARDEN'S BOTANICAL POP QUIZ*

## *ROUND 1: GENERAL KNOWLEDGE*

1. What is the main botanical ingredient in gin?
2. Which anniversary will the Oxford Botanic Garden be celebrating in 2021?
3. What is the main nutrient carnivorous plants extract from their insect prey?
4. What percentage of plant life is found in the ocean?
5. What is the name of the pigment that captures light for photosynthesis?
6. What is the name of the enzyme that drives photosynthesis?
7. What natural fibre gives plant cells their strength and is good for human digestion?
8. Which sugar does photosynthesis produce?
9. In a food chain or a food web, what role does a plant play?
10. Which type of organism pollinates the titan arum?



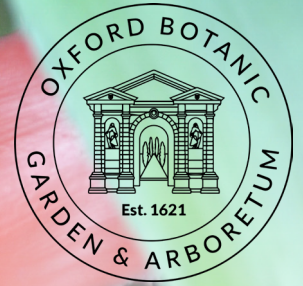


## OXFORD BOTANIC GARDEN'S BOTANICAL POP QUIZ

### ROUND 2: ROUND THE WORLD

1. Which country is coffee native to?
2. What is the state flower of Hawaii?
3. In 2019, which country produced the most grapes?  
A. Italy      B. Spain      C. China      D. America
4. Which country has the highest number of endemic plant species?  
(HINT: an endemic species is only native to a single defined location, in this case, a country.)  
A. Australia    B. Brazil      C. Malaysia    D. Madagascar
5. What is the common name for the national flower of India?
6. Which continent are potatoes native to?
7. What country is the King Protea pictured on the right the national flower of?
8. Which country are lemons native to?
9. Which country are venus fly traps native to?
10. In 2019, which country was the largest producer of barley?

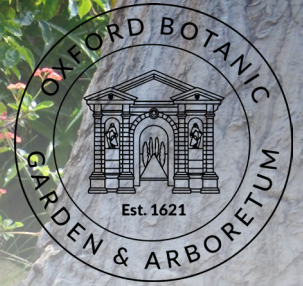




# *OXFORD BOTANIC GARDEN'S BOTANICAL POP QUIZ ROUND 3: GENERAL KNOWLEDGE*

1. Which plant is used to produce the classic blue colour of denim jeans?
2. Which of these fruits is the odd one out? (see Picture 1)
3. Referenced in Harry Potter, which plant has a root shaped like a human and has cries that can kill you?
4. Pick the plant! Only one of these organisms is actually a plant, which one is it? (see Picture 2)
5. What is the name of the world's largest tree (in volume?)
6. What is the name of the scale that measures the hotness of chillis?
7. Which parasitic plant is the odd one out? (see Picture 3)
8. What is the key word for this definition: the variety of plant and animal life in a particular habitat, a high level of which is usually considered to be important and desirable.
9. Which plant is best known for its ability to soothe burns?
10. What is the name of the biological process where one organism copies the appearance of another?



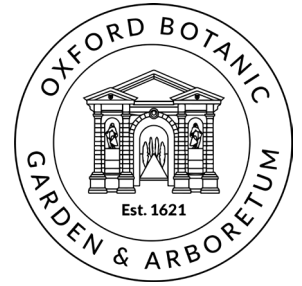


# *OXFORD BOTANIC GARDEN'S BOTANICAL POP QUIZ ROUND 4: NEAREST WINS*

1. To the nearest metre, how tall is the tallest tree?
2. How many acorns does an average oak tree produce in one year?
3. How old is the world's oldest tree?
4. How many plant species are there currently known and accepted in the world?
5. How many species are there in the Orchidaceae family?
6. On average, how many coffee beans make up a single espresso?
7. How many plant species do humans get 90% of their daily calories from?
8. In cm, how much can a bamboo plant grow in one day?
9. How many litres can a baobab tree store?
10. In cm, how tall was the tallest sunflower ever recorded?
11. On average, how many seeds are on one strawberry?
12. In cm, how large is the world's largest single flower?
13. How many millions of years ago did plants first colonise the land?
14. On average, how much did a kilogram of saffron cost in pounds (£) in 2020?
15. In Celsius, what is the hottest temperature that plant life can survive at?



# PICTURE 1



Blackcurrant



Strawberry

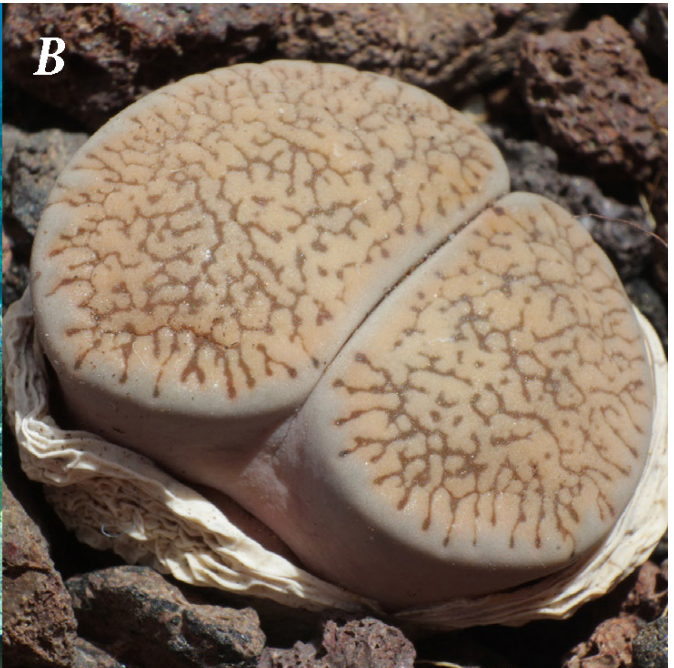
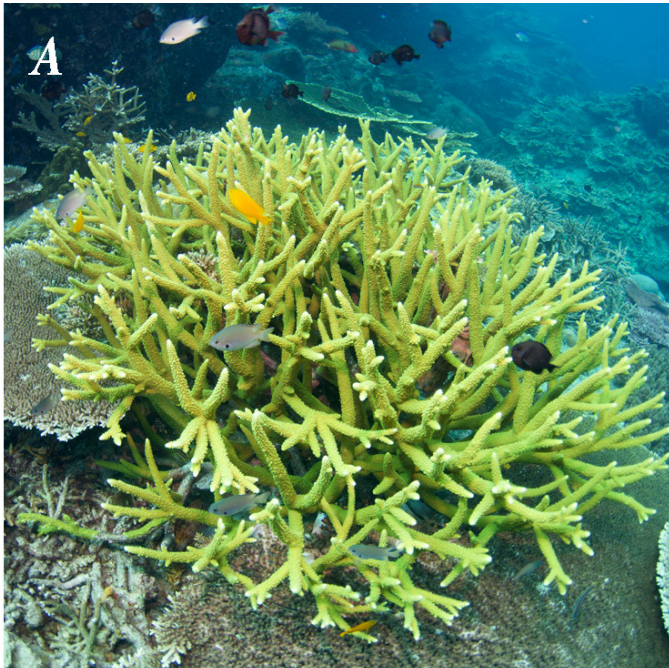
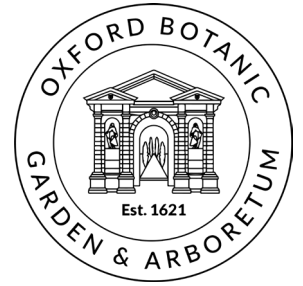


Blackberry



Raspberry

## PICTURE 2



## PICTURE 3

*Langsdorffia*



*Hydnora*



Mistletoe



*Rafflesia*



# *OXFORD BOTANIC GARDEN'S* *BOTANICAL POP QUIZ*



## ANSWER BOOKLET



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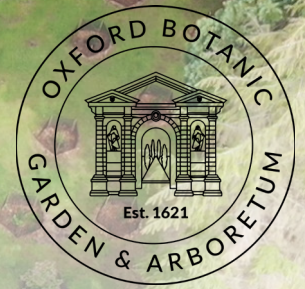


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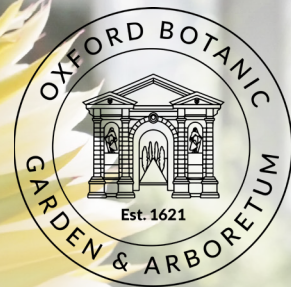


# *FLORA OBSCURA*

## *OXFORD BOTANIC GARDEN'S BOTANICAL PUB QUIZ*

### *ROUND 1 ANSWERS: GENERAL KNOWLEDGE*

1. **Juniper.** Gin is very varied in its flavours and strengths, one of the only truly defining characteristics of gin is that it must contain juniper berries.
2. **400th.** Oxford Botanic Garden will be celebrating its 400th anniversary in 2021.
3. **Nitrogen.** Carnivorous plants grow in environments that are very low in soil nutrition. To overcome this they have learned to attract alternative sources of nutrition, usually from insects.
4. **85%.** That's right, 85% of plant life on earth is actually found in the ocean! The majority of that is the phytoplankton found on the surface of the oceans, and which can go through such amazing growth booms that massive green swirls can be seen from the International Space Station.
5. **Chlorophyll.** This pigment is also what gives plants their green colouring.
6. **Rubisco.** Its full name is actually Ribulose-1,5-bisphosphate carboxylase, but RUBISCO is much easier to say.
7. **Cellulose.**
8. **Glucose.**
9. **Producer.** Plants are known as producers as they produce their own energy, whereas all herbivores and carnivores are known as consumers, as they rely on other organisms for their energy.
10. **Insects (flies or carrion beetles).** The titan arum has a thermogenic inflorescence (flowering structure), meaning it releases heat. Combined with the scent of rotting flesh it easily attracts its pollinators from miles around by mimicking a dead organism. The inflorescence can reach over 3 metres in height!



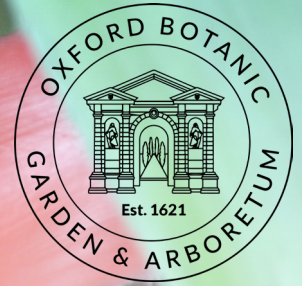
# FLORA OBSCURA

OXFORD BOTANIC GARDEN'S BOTANICAL PUB QUIZ

## ROUND 2 ANSWERS: ROUND THE WORLD

1. **Ethiopia.** Caffeine, the stimulant drug found in coffee, is arguably the most widely spread legal drug on the planet.
2. **Hibiscus.** There are over 220 different species of hibiscus, nearly all grown for their large, showy flowers.
3. **China.** That may surprise you! Italy produces the most wine, and Americans eat the most grapes, but China grows the most, of both wine grapes and table grapes.
4. **Brazil.** An endemic species is an organism that only exists in one geographic location, which can be as small as a field or as large as a whole country. Madagascar holds the number 2 slot, followed by Australia, China and then Malaysia.
5. **Lotus.** India has over 50,000 plant species, but it is the sacred lotus (*Nelumbo nucifera*) that is the country's national flower.
6. **South America.** Despite the UK's undeniable love of spuds, they are actually native to Peru in South America.
7. **South Africa.** The King Protea is also known as the giant protea or honeypot. It is a key component of the distinctive South African fynbos habitat.
8. **India.** Despite being well known for being grown throughout Europe, the ancestors of the lemon are native to northern India.
9. **The United States.** Charles Darwin called the Venus fly trap 'the most wonderful plant in the world' and it's easy to see why. The traps are triggered into shutting when an insect touches two separate trichomes (hairs on the trap's surface) in a set period of time.
10. **Russia.**





# FLORA OBSCURA

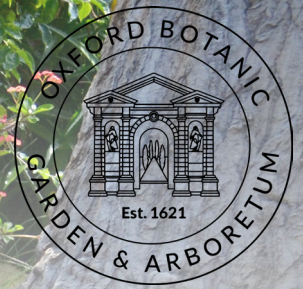
## OXFORD BOTANIC GARDEN'S BOTANICAL PUB QUIZ

### ROUND 3 ANSWERS:

### GENERAL KNOWLEDGE

1. **Indigo.** Did you know that Indigo is one of the oldest dyes in the world. The oldest known use of Indigo was found in Peru in an ancient burial ground and was found to be over 6,000 years old.
2. **Blackcurrant.** Blackcurrant is the odd one out because out of all the plants shown, it is the only real berry. Despite their names, strawberries, raspberries and blackberries are not true botanical berries. Technically the banana is though, as are aubergines, grapes and oranges.
3. **Mandrake.** There a lot of old medicinal and mythological tales linked to mandrake. For example, it used to be believed that sleeping with a mandrake root under your pillow would help with fertility.
4. **B.** B shows Lithops, otherwise known as living stones. Lithops species are native to South Africa and have evolved their appearance as camouflage. A is a coral, C is a fungus and D is lichen, none of which are plants.
5. **General Sherman.** The largest organism by volume on the planet is found in the Giant Forest in Sequoia National Park in California. It is a Giant Redwood known as General Sherman and is estimated to be 2,500 years old.
6. **Scoville scale.** It's a scale that goes into the millions, with standard pepper spray being between 2~5 million units. What is actually being measured is the concentration of capsaicin, the active ingredient that produces the sensation of heat on our tongues. Chillis are good for your health and are natural painkillers, as long as you don't exceed your tolerance!
7. **Mistletoe.** All four plants are parasitic, but mistletoe is only partially parasitic. It's green leaves mean it can still photosynthesise and create it's own food, but it steals some extra from it's host, whereas the other three plant parasites are completely reliant on their host for all of their nutrients.
8. **Biodiversity.**
9. **Aloe vera.**
10. **Mimicry.**





# FLORA OBSCURA

OXFORD BOTANIC GARDEN'S BOTANICAL PUB QUIZ

## ROUND 4 ANSWERS:

### NEAREST WINS

1. **116m.** The tallest tree is a coastal redwood that has been named Hyperion, after a Greek Titan. It certainly is titanic in it's height, being taller than both The Statue of Liberty (93.1m tall) and Big Ben (96m tall).
2. **10,000.** On particular successful years, which are known as mast years, a single mature oak tree can produce over 30,000 acorns.
3. **4852 years old.** The world's oldest tree is a Bristlecone pine called Methuselah. Its exact location is kept a secret for it's protection, however you can see the whole grove of ancient Bristlecone pines in the Ancient Bristlecone Pine Forest in Inyo National Park.
4. **350,966.** Isn't that huge! For some context, there are 6495 mammal species known, just under 10,000 bird species, around 8500 reptile species and just over 31,000 fish species.
5. **27,135 species.** There are a total of 620 plant families, one of which is the Orchidaceae family. Again for a direct comparison, the Hominidae family, or the Great Ape family, contains just eight species today: three different species of orang-utan, two species of gorilla, the chimpanzee, the bonobo and humans.
6. **65.** Did you know that coffee beans are only called beans because of their appearance, they are actually a berry.
7. **15.** The world has over 50,000 edible plants, but we humans have our favourites. 90% of our daily calories come from just 15 plants. Wheat, rice and maize are the top three, and they make up 60% of the world population daily calorie intake.
8. **89cm.** In addition to being edible, bamboo is an excellent renewal building resource thanks to how fast it grows. It is hollow, strong, light and flexible and is used for scaffolding and building material.
9. **4500 litres.**
10. **917cm.**
11. **200.**
12. **111cm.** The largest single flower ever recorded belonged to a Rafflesia (see Picture 3).
13. **470 million years ago.** The dinosaurs first appeared 240 million years ago and were wiped out 65 million years ago and humans only appeared 7 million years ago.
14. **£1905.** Not quite as bad as £48,000 for a kilogram of gold but easily the world's most expensive spice.
15. **72°C.** Dwarf swan-neck moss (*Campylopus pyriformis*), which thrives in a range of climates, was found in New Zealand in the Taupo Volcanic Zone where surface soil temperatures reached 72°C.