

Banque "Agro-Véto"
AT- 0417

LANGUE VIVANTE OBLIGATOIRE : ANGLAIS

Durée : 2 heures

Avertissement :

- L'usage de tout système électronique ou informatique est interdit pour cette épreuve.

L'épreuve comprend trois parties :

I – Thème : 6 points sur 20

II – Compréhension de l'écrit : 6 points sur 20

III – Expression écrite : 8 points sur 20

Vous indiquerez avec précision à la fin de la question de compréhension et à la fin de l'essai, le nombre de mots qu'ils comportent. Un écart de 10% en plus ou en moins sera accepté. Des points de pénalité seront soustraits en cas de non-respect de ces consignes.

I – Traduisez le texte ci-dessous et son titre en anglais.

La défaite de Clinton laisse de nombreuses femmes désemparées

Au soir de l'élection, Hillary Clinton avait prévu de fêter sa victoire dans une salle à l'immense plafond de verre, mais sa défaite face à Donald Trump l'a empêchée de briser cette barrière symbolique et a désemparé de nombreuses Américaines qui redoutent de voir leurs droits s'amoinrir.

Supprimer les obstacles qui entravent la carrière des femmes était l'une des raisons pour lesquelles Natasha Dodge avait placé ses espoirs en la candidate démocrate.

"Il n'y a plus de place pour nous", s'est désolée la jeune étudiante de 19 ans en apprenant le résultat de l'élection. Estimant qu'elle avait élevé Mme Clinton au rang de "figure maternelle", Natasha redoute désormais que le discours du président élu "normalise la haine envers les femmes".

Pour Julie Potyraj, 29 ans, la défaite de Mme Clinton est quelque chose de "très personnel" qui montre que "les femmes devront toujours en faire plus, sans que ça ne soit jamais suffisant".

la-croix.com, 15 novembre 2016 (extrait)

II – Lisez le texte ci-dessous et répondez en anglais à la question qui suit.

In a competition to find the world's least-loved animal, the mosquito would be hard to beat. Only a few species of the insect carry the parasites that cause human diseases such as West Nile virus, dengue and yellow fever, but the harm they cause is enormous. Malaria kills more than 400,000 people, mostly children, every year. Zika has spread to dozens of countries. If species such as *Anopheles gambiae* and *Aedes aegypti* could be eradicated, the world would surely be a better place.

Genetic engineers have already taken some steps in that direction: male *A. aegypti* mosquitoes that have been modified to become sterile have been released in Brazil, for example. Such approaches, controversial though they are among some Greens, are limited in their impact and geographical range.

Tournez S.V.P

A nascent technique called a “gene drive”, which could make it far easier to wipe out species, raises harder questions.

The term refers to the engineering of genes so that they are almost guaranteed to be inherited by offspring (the conventional laws of inheritance predict that offspring have only a 50% chance of inheriting a specific gene). You might, say, be able to engineer *A. gambiae* to produce only male offspring, release the modified bug into the wild and extirpate the entire species.

The use of gene drives in the wild is not imminent. But the research is proceeding rapidly, thanks to new gene-editing technology and to some lavish funding: this month the Bill and Melinda Gates Foundation said it would increase its investment in gene drives to \$75m. Mosquito species are the main targets, but need not be the only ones. Some wonder if gene drives could be used on the ticks that carry Lyme disease, or to change the genetic makeup of bats, a reservoir of infectious diseases. As interest grows, however, so do the concerns.

Some take an absolutist stance: it is morally wrong to take a deliberate decision to eliminate any species, however unpleasant. (...)

There are other, more powerful causes for concern. One is that the impact of getting rid of a species is hard to predict. The mosquito that just fed on a person’s arm may go on to feed a swallow. The absence of one bug might lead another to thrive. However carefully scientists model the impact of gene drives, the risk of unintended consequences looms large in complex ecological systems. Another worry is that gene drives could be used for evil: a mosquito could just as well be engineered to be more suited to carrying deadly diseases, for example.

That argues for two guiding principles in the use of the technology: reversibility and consent. Reversibility means that no species should be driven extinct in the wild without the means to reconstitute it. Colonies of unaltered organisms must always be retained, so that they can be reintroduced.

The second principle concerns consent. The presumption behind the regulation of genetically modified organisms is that their spread can be contained. The Cartagena Protocol on Biosafety allows a country to refuse entry to a GM crop, for example. Such rules will not contain gene drives, which will spread across borders without permits. A decision by one nation, or one group, to release them might eventually affect every country where the species exists. Governance arrangements must be international from the start. (...)

“The promise and peril of gene drives”, economist.com, 17 September 2016

Répondez à la question en utilisant vos propres mots. (100 words ±10%)

What arguments does the article put forward to demonstrate that the new technique called “a gene drive” is both promising and worrying?

III – Rédigez en anglais un essai en 200 mots (±10%).

Does scientific progress raise more issues than it ever has? Illustrate your answer with examples.

FIN DU SUJET