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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 21046-2007

Replacing GB/T 21046-2007

Neopyropia yezoensis

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(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting is required.

This document replaces GB/T 21046-2007 *Porphyra yezoensis*. Compared with GB/T 21046-2007, except for structural adjustments and editorial changes, in addition to the modifications, the main technical changes are as follows.

The scientific name has been changed (see Chapter 1 and 4.1, Chapter 1 and 3.1 of the 2007 edition); a) the classification status has been changed (see 4.2, 3.2 of the 2007 edition); b) the morphological and structural characteristics of the fronds have been modified (see 5.1, 4.1 of the 2007 edition); c) Added life history (see 6.1); d) Meiosis has been deleted (see 6.2 of the 2007 edition); e) Biochemical genetic characteristics have been deleted (see Chapter 7 of the 2007 edition); f) Added molecular genetics features (see Chapter 8); g) the isoenzyme test was deleted (see 8.3 of the 2007 edition); h) Added molecular genetic testing (see 9.4); i) Added judgment rules (see Chapter 10). j)

1 Scope

The main morphological and structural characteristics, reproductive characteristics, cytogenetic characteristics and molecular genetic characteristics are described, and the corresponding detection methods are specified.

The judgment rules.

This document applies to the detection and identification of germplasm of *Porphyra yezoensis*.

2 Normative references

This document has no normative references.

3 Terms and definitions

The following terms and definitions apply to this document.

Thallus

The gametophyte generation is formed by the germination of conchospores and monospores.

Note: Objects of cultivation and harvest.

Conchocelis

The sporophyte generation is formed by the germination of fruit spores.

Note: It is divided into free filaments and shell filaments, which are the objects of seedling cultivation in the process of germplasm preservation and cultivation respectively.

carpospore

The thallus vegetative cells develop and transform into fruit cells, which, after fertilization, divide to form fruit spore sacs containing multiple cells and release spores.

conchospore

The filamentous algae filaments grow and develop into sporangium branches. After maturity, each cell divides once (bisection) to form conchospores.

Ascus, the released spores.

Archeospore

The thallus vegetative cells transform into monosporangium, each of which produces individual spores that are released.

Note: The single spore is haploid and germinates directly to grow into a thallus, which is the asexual reproductive spore of *Porphyra yezoensis*.