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

GB/T 45298-2025

**Soil mapping - Specification for the symbols, colors and
legends of soil texture, pH and salinization maps at the scale of
1: 25 000 to 1: 500 000**

土壤制图 1:25000~1:500000土壤质地、酸碱度、盐渍化图的图式、用色及图例
规范

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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. Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed by the Ministry of Agriculture and Rural Affairs of the People's Republic of China. This document is under the jurisdiction of the National Technical Committee on Soil Quality Standardization (SAC/TC404). This document was drafted by: Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences, Nanjing Institute of Soil Science, Chinese Academy of Sciences, Agricultural Technology Extension and Service Center, Ministry of Agriculture and Rural Affairs Farmland Quality Monitoring and Protection Center, Beijing Academy of Agricultural and Forestry Sciences, Jiangsu Provincial Quality and Standardization Administration Research Institute. The main drafters of this document are: Ji Hongjie, Xu Aiguo, Shi Xuezheng, Lu Changai, Tian Youguo, Chen Shoulun, Ma Changbao, Huang Hongxiang, Zhang Renlian, Qu Xiaolin, Yu Dongsheng, Wei Dan, Huang Rong. Soil mapping 1:25000~1:500000 Soil texture, pH, Standards for the format, color and legend of salinization maps

1 Scope

GB/T 45298-2025 specifies the symbols, colours and legends for soil texture, pH and salinisation maps at scales from 1:25 000 to 1:500 000. Soil maps are produced in China by many institutions for many purposes, land use planning, agricultural extension, saline land improvement and pollution assessment, and if each chooses its own colour ramp the maps cannot be compared or joined across a boundary, which is precisely what a national soil survey needs to do. The standard sets, for each of the three map types, the classification intervals to be portrayed, the colour scheme with its specified values and the logic of the

ramp, the fill patterns and symbols, the legend layout and wording, the treatment of composite and uncertain units, and the base map, annotation and marginal information requirements, together with the rules for the different scales in the range. It takes effect on 1 September 2025.

This document specifies the format, color scale, and legend of soil texture, pH, and salinization maps with a scale of 1:25000 to 1:500000. With the annotation requirements, the verification method is described. This document is applicable to soil texture, pH, salinity, and soil erosion at the national basic scale of 1:25000 to 1:500000. It is used as a reference for the preparation of maps of other scales.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 24354 General map symbols for public geographic information

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 tone The color gradation formed by the overall relationship between colors. [Source: GB/T 16820-2009, 6.12]

3.2 Color target A series of color values used to establish the relationship between the colors rendered by a device and its input values. [Source: GB/T 9851.2-2008, 2.25]

3.3 specification for cartographic symbols Uniform regulations for the style, specifications, color, annotations, and outline decoration and use of cartographic element symbols on maps. [Source: GB/T 16820-2009, 2.26]

3.4 Nonsoilpropertiesmappingunit Map content composed of non-soil formations.

Note. Non-soil formations include glaciers, snow sheets, salt crusts, rock outcrops, etc.

3.5 soil texturesoiltexture The soil is divided into several combinations according to the relative proportions of soil particles of different particle sizes (differences in the mechanical composition of the soil).