

First edition
2022-04

Matcha tea — Definition and characteristics

Thé matcha — Définition et caractéristiques



Reference number
ISO/TR 21380:2022(E)

© ISO 2022



COPYRIGHT PROTECTED DOCUMENT

© ISO 2022

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

This is a preview of ISO/TR 21380:2022. [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Origins of matcha tea	1
4.1 Historical origins of matcha tea.....	1
4.2 Descriptive names — Matcha tea and green, black and white teas.....	2
4.3 Plant source, cultivation and harvest.....	2
4.3.1 Cultivation and harvest.....	2
4.3.2 Roof frame shading and harvest.....	2
4.3.3 Direct shading and harvest.....	3
4.4 Processing and production stages.....	3
4.4.1 Harvesting and processing.....	3
4.4.2 Dry leaf grinding.....	3
4.5 Sensory analysis.....	4
4.6 Shelf life.....	4
5 Characteristics	4
5.1 General characteristics.....	4
5.2 Chemical characteristics.....	5
Annex A (informative) Appearance of sub-types of matcha tea and tencha tea	6
Annex B (informative) Cultivation and processing	7
Bibliography	11

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 34 *Food products*, Subcommittee SC 8, *Tea*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This is a preview of ISO/TR 21380:2022. [Click here to purchase the full version from the ANSI store.](#)

Introduction

Tea is grown and manufactured in numerous countries in the world and is blended and/or consumed in many more. There is some confusion as to the origins, cultivation, appearance and processing for matcha tea and how this can or does differ from green, black, white and other types of tea.

Matcha tea (see [Figure A.1](#)) is traditionally prepared with hot water as a beverage in the Japanese tea ceremony called “Chanoyu”. Matcha tea is now consumed as a tea beverage prepared with hot water worldwide. In modern usage, matcha tea is also an ingredient in food and beverages.

The desired characteristics of matcha tea and the resulting liquor infusion depend upon a number of factors including the tea plant cultivation and the unique processing method and manufacture using fresh tea leaves.

This document:

- specifies the plant source of matcha tea;
- explains the requirements for cultivation, processing (drying) and grinding;
- identifies the physical and chemical characteristics which, if met, identify that the tea has followed good manufacturing practice.

The cultivation and processing methods are presented as the typical examples which have been developed for the harvest of tencha tea leaves (see [Figure A.2](#)) and the production of matcha tea in Japan.

Matcha tea is a specific type of green tea prepared with plant cultivation using shading, leaf steaming and leaf grinding processes. An investigation of the levels of L-theanine, chlorophyll and catechins – including epigallocatechin gallate (EGCG) and epigallocatechin (EGC) – in matcha tea indicates that the levels can vary to those in green and black teas and shows they support the discrimination between matcha, green and black teas. It is possible that the differentiation between matcha, green and black teas needs the use of ratios of the various chemical components, among others.