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

LY/T 1669-2006

**Vehicle-mounted air-supply high-range sprayer
(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.

This document replaces LY/T 1669-2006 "Air-driven High Range Sprayer". Compared with LY/T 1669-2006, except for structural adjustment and in addition to editorial changes, the main technical changes are as follows.

- a) Changed the scope of the document (see Chapter 1, Chapter 1 of the 2006 edition);
- b) Added the definitions of "sprayer", "air cylinder" and "nozzle ring" (see 3.1, 3.3, 3.4);
- c) Added the expression method of the spray range of the sprayer (see Figure 1);
- d) Changed the definition of range (see 3.2, 3.1 of the 2006 edition);
- e) Changed the model compilation rules (see Chapter 4, Chapter 4 of the 2006 edition);
- f) Added main technical parameters (see Chapter 5);
- g) Changed the general requirements (see 6.1, 5.1 of the 2006 edition);
- h) Added the requirements and inspection methods for the start-up time of the fan (see 6.2.1);
- i) The requirements and inspection methods for the airtightness of the whole machine have been changed (see 6.2.2, 5.2.1 of the 2006 edition);
- j) Added the requirements for the horizontal range and changed its inspection method (see 6.2.3, 6.3.2 of the 2006 edition)
- k) Changed the requirements and inspection methods for the vertical range (see 6.2.4, 5.2.5, 6.3.2 of the 2006 edition);
- l) The requirements and inspection methods for droplet size have been added (see 6.2.5);
- m) Added requirements and inspection methods for generator sets (see 6.3.1);

- n) Added requirements and inspection methods for air ducts (see 6.3.5);
- o) Added requirements and inspection methods for nozzle rings (see 6.3.6);
- p) Added requirements and inspection methods for nozzles (see 6.3.7);
- q) Changed the requirements and inspection methods for components of the liquid medicine pipeline (see 6.3.8, 5.4.4, 6.3.5 of the 2006 edition);
- r) Deleted the sealing requirements of the medicine box (see 5.4.3.4 of the 2006 edition);
- s) Added requirements and inspection methods for remote controllers (see 6.3.9);
- t) The requirements and inspection methods for the insulation of generator sets have been added (see 6.4.1);
- u) Added requirements and inspection methods for motor insulation (see 6.4.2);
- v) Changed the requirements and inspection methods for the noise next to the operator's ear (see 6.4.3, 5.2.3, 6.3.3 of the 2006 edition);
- w) Delete the spray volume test, the liquid tank capacity measurement and the liquid tank sealing test (see 6.3.1, 6.3.4.1, 6.3.4.3 of the 2006 edition);
- x) Added reliability requirements and inspection methods (see 6.5);
- y) Changed the requirements and inspection methods of appearance quality (see 6.6, 5.3.1, 5.3.2, 5.3.3, 5.3.4 of the 2006 edition);
- z) Changed the assembly quality requirements and inspection methods (see 6.7, 5.2.6 of the 2006 edition);
- aa) The logo has been changed (see 7.1, 9.1 of the 2006 edition);
- bb) Deleted the "spray volume record form", "horizontal range record form", "vertical range Amount, Residual Amount, Sealing Record Form" (see Appendix A~Appendix E of the 2006 edition).

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

1 Scope

This document specifies the terms and definitions, model compilation rules, main technical parameters, technical requirements and Test methods, signs, instructions for use, packaging, transportation and storage.

This document is applicable to the axial wind force transporting liquid mist that uses the vehicle as the mobile carrier, the generator set as the power, and the axial flow fan to form Sprayers for the prevention and control of forestry pests and diseases (hereinafter referred

to as "sprayers"). Vehicle-mounted high-range spray that uses a centrifugal fan as the wind to send droplets machine can also refer to use.

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references for documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 191 Packaging, storage and transportation icon marks GB/T 755 Rating and performance of rotating electrical machines GB/T 5226.1 Safety of machinery and electrical machinery and electrical equipment - Part 1: General technical requirements GB/T 9480 Rules for compiling instruction manuals of agricultural and forestry tractors and machinery, lawn and gardening power machinery GB 10395.6 Agricultural and Forestry Tractors and Machinery Safety Technical Requirements Part 6: Plant Protection Machinery GB/T 13306 Signage GB/T 13384 General Technical Specifications for Packaging of Mechanical and Electrical Products GB/T 15548 General technical specifications for three-phase synchronous engines driven by reciprocating internal combustion engines HG/T 3043 Rubber hose for agricultural spraying JB/T 5673 General technical requirements for painting of agricultural and forestry tractors and implements JB/T 9802 Three-cylinder column and piston pump for sprayer and washing machine JB/T 9806 Diaphragm pump for sprayer JB/T 10562 Technical Specifications for Axial Fans for General Purposes LY/T 1045 Modeling method of forestry machinery products

3 Terms and Definitions

The following terms and definitions apply to this document.

sprayer

Placed on the carrier vehicle to move and work, the liquid pump exerts pressure on the liquid medicine and sprays the liquid medicine once through the nozzle ring at the outlet of the air cylinder.

The spray group is formed by the axial wind force generated by the axial flow fan to carry out secondary atomization on the droplet of the liquid medicine and transport the droplet to the canopy of the forest.

device.

range range

The sprayer uses the wind generated by the fan to transport the liquid medicine droplets to the highest or farthest effective distance.