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**मसौदा संशोधन सं. 1**

**आई एस 3906 : 2024 फसल संरक्षण उपकरण – हस्त-चालित पीठ पर लादा जाने वाला फुहारा,  
पिस्टन प्रकार – विशिष्ट और परीक्षण संहिता (पांचवां पुनरीक्षण)**

*Draft AMMENDMENT NO. 1 to*

**IS 3906 : 2024 CROP PROTECTION EQUIPMENT — HAND-OPERATED KNAPSACK  
SPRAYER, PISTON TYPE — SPECIFICATION AND TEST CODE  
(Fifth Revision)**

Agricultural Machinery and Equipment Sectional Committee, FAD 11	Last date for Comments: <b>1 November 2025</b>
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[Page 1, clause 1, Para 2] — Substitute ‘The sprayers of this type are normally used with a working pressure of 300 kPa to 500 kPa (100 kPa = 1.019 7 kgf/cm<sup>2</sup> = 1 bar).’ for ‘The sprayers of this type are normally used with an average working pressure of 300 kPa to 500 kPa (100 kPa = 1.019 7 kgf/cm<sup>2</sup> = 1 bar).’

[Page 12, clause 12.2.1, Para 1, sentence 1] — Substitute following for the existing:

‘The discharge outlet of the spray shall be closed i.e., no discharge shall be allowed from the sprayer, and the handle shall be operated to develop the pressure in the sprayer until a pressure of minimum two and a half times the normal working pressure is developed.’

[Page 14, Annex B] — Substitute the following text under ‘Specification Sheet’ for existing:

- a) Name of the purchaser
- b) Preference of material for various components (see 4)
- c) Tank capacity (see 6.1)
- d) Type of handle (see 6.9)
- e) Type of cut-off device (see 6.13)
- f) Type of lance (see 6.13)
- g) Type of nozzle (see 6.14)
- h) Length of delivery hose (see 6.12)
- i) Spare parts needed (see 7.2)
- j) Optional items (see 7.4)
- k) Filling funnel (see 6.4.1)
- l) Choice of operation (see 7.3.4)

[Page 18, Annex D, clause D-7.2.2, Para 2] — Substitute ‘The test liquid shall be changed after every 6 hours of use.’ For ‘The test liquid shall be changed after every 6 months of use.’

[Page 24, Annex F, clause F-3.3] — Substitute the following for existing:

‘The hydraulic spray nozzle when tested in accordance with F-7 and F-9 at a pressure of 300 kPa ± 30 kPa after operating for 48 h duration with continuous stretches of 6 h, variation in discharge rate and spray angle from initial values should not be more than ± 10 percent and ± 3° respectively.’

[Page 24, Annex F, clause F-8.1.1] — Substitute the following for existing:

‘The patternator (see Fig. 20) normally consist of 16 channels each  $25 \pm 0.25$  mm wide and of any convenient length provided that it encompasses the area of the spray. The number of channels may be increased or decreased so that the whole of the spray falls within the patternator. The channels lead the liquid directly to the measuring tube having a bore not more than 24 mm and be long enough to hold minimum of 200 ml test liquid. The depth of channels shall be at least 100 mm to avoid rebound of the spray droplets. The top edge of the trough dividers shall be sharp (tapered to not more than 0.25 mm width on the top edge) and straight in the horizontal plane, so that no point along with the edge lies more than 1 mm from the straight line joining the corresponding point at each end. The top edges of the dividers shall be positioned so that when a straight edge is laid across the full width of the front and back of the troughs no edge lies more than 1 mm below this. Each divider shall be straight in the vertical plane to within  $\pm 0.25$  mm.

NOTE — The surface of patternator should be such that the droplets should not stick on it.’

(FAD 11)