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Comprehension contradicts to the induction within Łukasiewicz predicate logic. (English)

Zbl 1173.03024

Arch. Math. Logic 48, No. 3-4, 265-268 (2009).

The author gives a simpler and shorter proof of Hájek's theorem that the mathematical induction on ω implies a contradiction in the set theory with the comprehension principle within Łukasiewicz predicate logic $\mathcal{L}\forall$ [*P. Hájek*, Arch. Math. Logic 44, No. 6, 763–782 (2005; Zbl 1096.03064)] by extending a related proof given by the author in [Arch. Math. Logic 46, No. 3–4, 281–287 (2007; Zbl 1110.03049)] so as to be effective in any linearly ordered MV-algebra.

Reviewer: Liu Yingming (Chengdu)

MSC:

03B52 Fuzzy logic; logic of vagueness

03E72 Theory of fuzzy sets, etc.

06D35 MV-algebras

Cited in 1 Document

Keywords:

comprehension principle; mathematical induction on ω

Full Text: DOI

References:

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- [3] Yatabe, S.: Distinguishing non-standard natural numbers in a set theory within Łukasiewicz logic. *Arch. Math. Log.* (accepted) · Zbl 1110.03049

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