stars, some of these should be red supergiants. These would have an apparent pmagnitude of 18 to 20 if Mkn 348 is associated with the M31 group as Arp suggests. Our 0.9-meter charge-coupled detector-(CCD) calibration frames of this object can detect individual stars fainter than magnitude 21 (2); however, we see no such individual stars in our measurements, which suggests that it is more distant than the M31 group. If the telescope time can be found for such a project, a definitive confirmation of this could be obtained with one or two 20minute R-bandpass CCD exposures with a 4-meter or 5-meter telescope.

If, on the other hand, Mkn 348 is at the distance derived from its red shift and the Hubble law, there is no reason to expect that it would have a supernova rate any greater than that of M51. Supernovae, after all, are associated with stars, and the low optical surface brightness in the outer regions of Mkn 348 implies a small number of stars in the extended outer regions of this galaxy.

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## REFERENCES

T. Heckmann, R. Sanccisi, W. Sullivan, B. Balick, Mon. Not. R. Astron. Soc. 199, 425 (1982).
S. Simkin, Astrophys. J. 309, 100 (1986).

## **Reference** Manager

Ruth E. Wachtel's review (27 Feb., p. 1093) of bibliographic software designed for the scientific community served a useful purpose in bringing the features of such programs to the attention of investigators. Although I was naturally pleased with her favorable evaluation of Reference Manager, I would like to correct several inaccuracies. Reference Manager does perform searches using the Boolean operator OR (as well as AND and NOT). Although this is not indicated in the main menu, it is clearly explained both in the help messages that can be brought up on the screen and in the documentation that comes with the program. The results of a search can easily be alphabetized not only by author but even by year of publication or journal name.

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