# ADDENDUM AND CORRIGENDUM TO "WEAK ($C_{11}{}^+$) MODULES WITH ACC OR DCC ON ESSENTIAL SUBMODULES"

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It has come to our attention that there is a positive answer to the following question mentioned in [2, p. 734] : "We may conjecture whether a $(WC_{11})$-module with essential socle is a $(C_{11})$-module? ". Unfortunately in [2, Example 9] we mistakenly stated that

$$R = \left[ \begin{array}{cc} \mathbb{Z}/\mathbb{Z}p^2 & \mathbb{Z}/\mathbb{Z}p^2 \\ 0 & \mathbb{Z}/\mathbb{Z}p^2 \end{array} \right]$$

is not right $(C_{11})$. However this $R$ is, in fact, right $(C_{11})$ (see, [1, Theorem 2.4]). Moreover the following proposition provides the answer to the question which do not affect the other results in the paper.

**Proposition.** *Let $R$ be a ring and $M$ an right $R$-module. If $M$ is a $(WC_{11})$-module with essential socle then $M$ is a $(C_{11})$-module.*

*Proof.* Let $X$ be a submodule of $M$. If $X = 0$ then $M$ will do. Assume $X \neq 0$. Since $Soc X$ is a semisimple submodule of $M$, there exists a direct summand $L$ of $M$ such that $Soc X \cap L = 0$ and $Soc X \oplus L$ essential in $M$. It is clear that $Soc X$ is essential in $X$. Hence $X \cap L = 0$. So we have $Soc X \oplus L \leq X \oplus L \leq M$. It follows that $X \oplus L$ is an essential submodule of $M$. By [1, Proposition 2.3], $M$ is a $(C_{11})$-module.

## REFERENCES

1. P. F. Smith and A. Tercan, Generalizations of CS-modules, *Comm. in Algebra,* **21** (1993), 1809-1847.

2. A. Tercan, Weak $(C_{11}^+)$ modules with acc or dcc on essential submodules, *Taiwanese J. Math.* **5** (2001), 731-738.

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