

CORRECTION TO OUR PAPER "ON FROBENIUS EXTENSIONS II"

TADASI NAKAYAMA and TOSIRO TSUZUKU

The paper appeared in Vol. 19 (1961), pp. 127-148 of this Journal. The last part of Theorem 22 of the paper should be corrected into: *Conversely, if E is α' -Frobenius over A_1 , then A is quasi-free β -Frobenius over B , provided that A is directly decomposed into a finite number of B -right submodules each of which is (B -right) isomorphic to a right ideal of B and one of which is indeed isomorphic to B .*

Besides the erroneous mix-up of left and right (which occurred in our original statement of the last part of the theorem as well as in two formulas in its proof (p. 133)), our (originally improper) deduction of $y_v = 0$ in the second line of p. 134 is remedied by the above additional assumption on a B -right direct summand isomorphic to B .

That the conclusion is false without this additional assumption can be seen, for example, by taking A to be the ring of all 2×2 matrices over a field and B to be its subring of (lower) triangular matrices (over which A can easily be seen to be quasi-free).

Except our adoption of automorphisms, our so corrected theorem 22 is covered by Kasch's finer result (Sätze 1, 2) in his recent paper "Projektive Frobenius-Erweiterungen", Sitz.-ber. Heidelberger Akad. Wiss. 1961, 89-109. Our only excuse is perhaps that *our above example settles, negatively, also a problem raised by Kasch at the end of §2 (as well as at the opening of 2.4.) of this paper.*

Received February 20, 1962.