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Noether-Lefschetz theory and a question of Srinivas. Preliminary report.

We present a variant of the Noether-Lefschetz theorem for families of surfaces in \mathbb{P}^3 with a fixed base locus of dimension at most one, which may be non-reduced, reducible, or unmixed. Using concrete base loci and power series techniques we answer a question of V. Srinivas for rational double point surface singularities. (Received February 03, 2014)