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 **${}^9\text{Be}({}^{17}\text{C}, {}^{15}\text{Be}2\text{p})$  2011Sp01**

<u>Type</u>	<u>Author</u>	<u>History</u> <u>Citation</u>	<u>Literature Cutoff Date</u>
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The present work was motivated by a study of the  ${}^{16}\text{Be}_{g.s.}$  decay mechanism, which could be expected to 1-n or 2-n decay, depending on the  ${}^{15}\text{Be}$  mass.

A beam of 55 MeV/A  ${}^{17}\text{C}$  ions impinged on a 470 mg/cm<sup>2</sup>  ${}^9\text{Be}$  target at the NSCL MoNA/Sweeper dipole magnet target position. Following 2p removal events in the  ${}^9\text{Be}$  target, the experiment was configured to measure the momenta of  ${}^{14}\text{Be}$  ions using the sweeper dipole magnet and the momenta of neutrons using the MoNA neutron array. No peaks were observed in the kinematic reconstruction of  ${}^{14}\text{Be} + \text{neutron}$  events. The authors discuss the possible case where  ${}^{15}\text{Be}$  decays to the  ${}^{14}\text{Be}^*(1.54 \text{ MeV})$  state, which is known to decay to  ${}^{12}\text{Be}+2\text{n}$ . However, the statistics were not sufficient to analyze the  ${}^{12}\text{Be}+3\text{n}$  events. It is suggested that  ${}^{15}\text{Be}$  must be unbound by 1.54 MeV for this decay to occur.