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111 Cummington Street, Boston, MA 02215. *Regular Permutation Groups of Order  $mp$ .*

For  $\Gamma$  a group of order  $mp$  for  $p > m$  prime, we study the enumeration of the regular permutation subgroups of  $Perm(\Gamma)$  normalized by the left regular representation of  $\Gamma$ . Part of our goal is to determine the number and classes of those regular subgroups, as well as to apply this information to the study of Hopf-Galois structures on separable field extensions  $L/K$  with  $\Gamma = Gal(L/K)$  since these structures are in one-to-one correspondence with such regular subgroups. This is a generalization of the author's work on the case where  $m = 4$ . (Received January 12, 2009)