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Diabrotica cristata, a Seldom-Collected Leaf Beetle, Found on Buffalo Mountain, Floyd County, Virginia (Coleoptera: Chrysomelidae)

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The galerucine chrysomelid *Diabrotica cristata* (Harris) belongs to the same group of the genus as the well-known *D. barberi* Smith & Lawrence, the northern corn rootworm, and *D. virgifera virgifera* LeConte, the western corn rootworm. Unlike those pest species, however, *D. cristata* is seldom encountered by the general collector and poorly represented in insect collections. This univoltine leaf beetle is widespread east of the Rocky Mountains, particularly west of the Mississippi in relict Midwestern prairies (Wiesenborn & Krysan, 1980; Yaro & Krysan, 1986; Krysan & Smith, 1987). Its distribution along the eastern seaboard tends to be highly localized, and little is known about specific habitat preferences except for its

occurrence in serpentine barrens of Maryland and Pennsylvania. Adults can be collected in serpentine barrens on inflorescences of grasses and forbs where they apparently feed on pollen. The larval host in eastern serpentine barrens was suggested to be little bluestem (*Schizachyrium scoparium* (Michx.) Nash) (Wheeler, 1988), but is more likely to be big bluestem (*Andropogon gerardii* Vitman), a perennial grass that serves as the larval host plant in Midwestern prairies (Yaro & Krysan, 1986; Krysan & Smith, 1987).

Herein *D. cristata* is recorded from Buffalo Mountain in southern Floyd County, Virginia, southeast of Willis. This monadnock, maximum elevation 1210 m, rises

abruptly above the Blue Ridge upland (Rawinski & Wieboldt, 1993). It is a well-known botanical site, but entomologists generally have devoted little attention to the diverse communities of this important natural area. A significant entomological discovery on Buffalo Mountain is the recently described mealybug *Puto kosztarabi* Miller & Miller, the only known eastern North American species of this Holarctic genus (Miller & Miller, 1993).

Adults of *D. cristata* were observed mainly on inflorescences of big bluestem on 27 August 1994. On Buffalo Mountain they were also found on inflorescences of *Liatris graminifolia* Willd. and *Solidago* sp. in the mafic glade vegetation classified as the *Andropogon gerardii* - *Liatris graminifolia* - *Senecio pauperculus* Alliance. This vegetation type is characterized by magnesium-loving and tolerant plants. The magnesium-rich glade soils of Buffalo Mountain are similar in calcium-magnesium ratios to those of serpentine barrens (Rawinski & Wieboldt, 1993). Previous Virginia records of *D. cristata* are Pimmit Run, Fairfax Co.; Nelson Co.; and Four Mile River and Kearny Station, counties unknown (Krysan & Smith, 1987). Additional specimens of this little-known leaf beetle should be looked for in habitats where big bluestem occurs. Relict prairie communities characterized by low calcium-magnesium ratios, such as Bluff Mountain in western North Carolina, might be expected to support populations of *D. cristata*. *Diabrotica cristata* is similar in size and habitus to the familiar northern corn rootworm but can be distinguished from other species of the genus by its uniformly dark (piceous) elytra. The color morph occurring in the East has the pronotum yellow, rufous, or dark (Krysan & Smith, 1987).

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